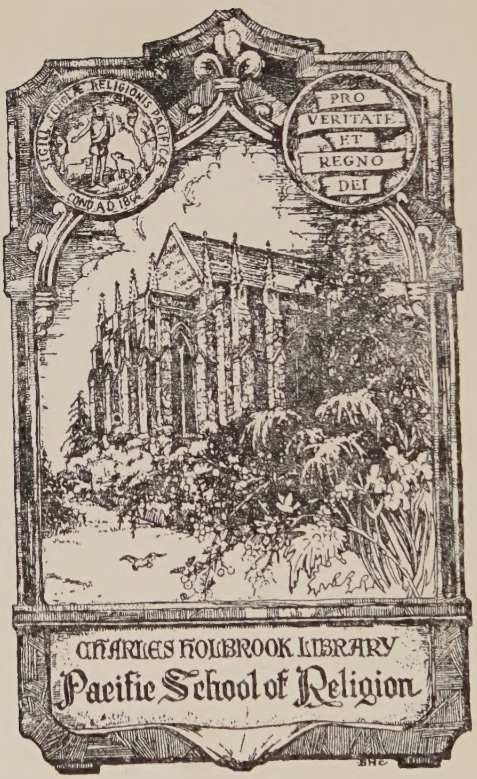
SUCCESSFUL BOYS' CLUBS

BY
R. P. ANDERSON



Gift of
Margaret E. Lobb
In Memory of

Margaret E. Lobb.

"All for Christ."

Successful Boys' Clubs

FOR CHURCHES AND YOUNG PEOPLE'S SOCIETIES

BY

R. P. ANDERSON

Associate Editor of The Christian Endeavor World

United Society of Christian Endeavor
Boston and Chicago

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Introduction

By Dr. Francis E. Clark

I HAVE long felt the need of such a book as Mr. Anderson has now given to the public, and I am exceedingly glad that he has undertaken the task, which, to my mind, he has accomplished so admirably.

A false notion exists in the minds of many people that the Christian Endeavor Society, whether Young People's, Junior, or Intermediate, has no mission outside of the prayer-meeting and certain committees which are identified with the society.

To be sure, the Christian Endeavor Society, whatever age it reaches, is primarily a religious society. It works under the direction of the church, and seeks to enable the young people to do the will of the pastor and of the church, and its motto has always been "For Christ and the Church."

But no narrow, hide-bound significance should be given to the scope of its activities. While the distinctive religious duties are always placed first, yet recreation, if it is really re-creation, is entirely in harmony with the theory and practice of Christian Endeavor.

From the beginning, social gatherings have been one great means of bringing the young people of the societies together, making them acquainted with one another, and promoting in the end their religious life. So, too, outdoor sports, rambles, games of various kinds, that are wholesome and invigorating, may be taken under the ægis of Christian Endeavor, and children and young people may thus be taught that every good thing that strengthens them in body, mind, or soul is in accordance with the will of the Master, and is not foreign to the spirit of the church.

So long as the devotional meetings are maintained, so long as the Christian Endeavor pledge is observed in its spirit, so long as the distinctively religious work of the society is not sidetracked, I can see no danger, but only good, from the association of boys and girls, under the leadership of wise older friends, along the many lines suggested by Mr. Anderson.

The fact that many of these plans have actually been carried out by Junior and Intermediate societies of Christian Endeavor is a practical exemplification of the theoretical value of these views.

The wide range of Mr. Anderson's suggestions, while it is neither expected nor intended that every society should adopt them all, adapts the book to the use of societies in small places

and in large places, in city and in country, by Intermediates as well as by Juniors. I wish for the volume great success in building up a manly, womanly, wholesome life among the Christian boys and girls of the coming generation.

FRANCIS E. CLARK.

Foreword

JUNIOR and Intermediate Christian Endeavor societies offer a splendid field for work with boys. The aim of the following pages is to supply practical suggestions to superintendents who may wish to organize and carry on a work that will attract, interest, and instruct the boys of the church and neighborhood.

Clubs are not expected, of course, to use all the plans here suggested. The constitution and the entire framework of the club may be modified to suit local conditions. Nothing is mandatory. A wise choice should be made of work to be done, after the club has been organized, and the programme selected should then be carried out with enthusiasm.

Some of the features of the Boy Scouts will be recognized, in modified form, particularly the graded membership. No attempt is made here, however, to organize a national association of Christian Endeavor Boys' Clubs. The question as to whether a society wishes a club for its boys or not is for the local leaders to decide. If, for convenience, the clubs of a district or a city combine, they are, of course, at liberty to do so; but this, too, is a purely local matter.

While originality is not claimed for these pages, the author believes that the forms suggested will prove helpful to many workers. He has gathered what seems most useful from many fields, and presents the result with the prayer that it may prove acceptable to the workers and beneficial to the boys.

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Successful Boys' Clubs

CHAPTER I

THE REASON WHY

Why Work With the Boys.

THEODORE ROOSEVELT has said: "If you are going to do anything permanent for the average man, you have got to begin before he is a man. The chance of success lies in working with the boy and not with the man."

Superintendents of Junior Christian Endeavor societies are constantly thinking of how to deal with the boy. It is evident that the hour spent with him in the Sunday-school or the Junior society is insufficient to meet the demands of the situation. There are six days of the week in which the boy is left almost entirely to his own devices, and the unanimous testimony of social workers is that his love of fun, his interest in doing things, and his spirit of adventure tend to lead him into temptation and to prepare the way for a final fall.

The proper place for the instruction of the boy is the home. That is true. But how many homes perform this function? When we are told that the Junior Christian Endeavor

society should not take upon it the duties of delinquent parents by furnishing even an hour's religious training for their children, one wonders what is to become of the children ; for the parents will not perform their duties better if the Junior society closes its door, and the only sufferers would thus be the boys and girls themselves. Besides, work with the children does not mean that the parents are absolved from their responsibilities. The Sunday-school and the Junior society supplement the home ; that is all. And since the aid which these organizations give at present is admittedly insufficient, whatever additional assistance can be supplied will but extend their influence, and help to save the boys.

The worker has his eye on the boy, not on the parents. He is anxious to make noble manhood out of the pliable material at his hand. If the homes of to-day are deficient in moral power, and if parents shirk their tasks, the training that is given boys and girls outside the home may lay the foundation for better homes in the future and for better parents in the next generation.

The Adaptability of Christian Endeavor.

Time and again Christian Endeavor has proved its adaptability to all social conditions. The committee system has made it possible for

a society to take up almost any kind of work that young people can do. The society is a school of expression, not only in the prayer-meeting, but in the social life of the community.

There is no reason why the activity of Junior and Intermediate societies, and Young People's societies, too, for that matter, should not be extended to embrace boys' and girls' clubs, manual work, games, indoor and outdoor sports, nature-study, and many other things that are both educational and interesting.

This would not necessarily mean more work for the superintendent, but more organization, and more workers. In most societies there are young men and young women who would be happy to find a useful sphere of service by taking charge of a group of boys or girls, becoming comrade, friend, leader, not only in religious exercises, but in an endless variety of mundane tasks.

There are Young People's societies that pine and die because the young people fail to find things to do that seem worth while to them. Earnest young men and women outgrow putting flowers on the pulpit, however beautiful and necessary that may be. The time comes when the seriousness of life dawns upon them, and they want to help. Here is an open door for them. There is work to be done that calls for the highest kind of intelligence and tact,

and that yields the best kind of results—work among the boys and girls.

Possibilities in Work Among the Boys.

There is soil that will not respond to the touch of a gardener's hand, but no boy is utterly bad in that sense. Miss Margaret Slattery tells of a "bad" boy who was the despair of his teacher. He seemed hopeless. One night he walked home with her, and as he left her he stammered, awkward with the bashfulness of his fourteen years, "If you was me, what would you be when you grew up?" Astonished at the suddenness of the question, the teacher asked, "What have you thought of?" "A doctor," said the boy. "If I could only be a doctor!"

The disheartened teacher had just made up her mind to resign her position, but the boy's evident desire to get on filled her with new hope. She stayed on, helped him, worked with him, loaned him books, and saw him enter the academy and grow to young manhood.

The year he entered college she married, but she did not forget him. He received his degree and commenced a course of useful service. "You did it," he told her; "you are responsible for all of it."

Work among boys awakens their slumbering ambition. It is work that calls for infinite pa-

tience, but what a harvest results! What can be greater than making a man? Boys' work gives large returns.

A local preacher in England, who had not enjoyed the benefits of modern education, but had just "growed" like Topsy, uncared for and lonely, used to pray, "O Lord, bless the rising generation, *for in my time there was no rising generation.*" If the coming generation is to "rise" in any true sense, it must be through the uplift that we can give.

We must stand by the boy.

In large cities it is often found that boys of Roman Catholic parentage take advantage of boys' clubs connected with Protestant churches, in large numbers. Some workers object to the club on the ground that the Catholic boys swamp the Protestant element utterly. The entrance of Roman Catholic boys is objectionable only for one reason: they will not stand for religious teaching. Parents and priests make little objection so long as the boys only receive material advantages, but the line is rigidly drawn at any attempt to give religious instruction from the Protestant point of view.

How shall we deal with this problem? Shall we give up the attempt to inculcate the truths of religion for the sake of getting a crowd of Roman Catholic boys? Most assuredly not. The most efficient factor in the making of man-

hood is the religious impulse, and we must not stultify our efforts or hamper ourselves in any way for the sake of numbers. One object should frankly be to win the boys to Christ, and this cannot be done if we permit ourselves to be gagged.

What Aim?

The aim of organized work among boys, like the aim of the Sunday-school, the Junior society, and other organizations, is to make men. But the means are different. We recognize the fact that manual work and even play may have a deeply religious significance, and boys who learn lessons in co-operation, industry, thrift, and self-reliance, are being instructed in needed, if homely, virtues.

We often hear complaints, both from the Sunday-school and the Junior society, about the difficulty in getting the boy to attend. The exercises of religion often leave him unmoved. But get him out into the open country, roll on the grass with him, fish, camp, play baseball with him, and show him that you are human, and he will worship you, and listen to you, and discern the background of religion in your life.

The heart of a boy craves a hero. It turns toward comradeship and sympathy. The boy is not revealed in the church, the Sunday-

school, or the Junior society. He cannot let himself go there. But he will yield himself up wholly, without reserve, in the companionship of play and good fellowship. These are powerful factors, surely, in the making of a man. This is the aim of all our work in the society and out of it: to make Christian men and women out of the boys and girls.

How to Use the Book.

The purpose of the present volume is to bring suggestions to our Junior and Intermediate workers. The suggestions may be taken as they stand, or they may be modified to suit local conditions. In some societies it may not be found wise to form clubs or bands. In such cases workers may adopt some of the plans for indoor or outdoor games and sports, without reference to any organization whatever. When an organization is found advisable—and we believe this is the most effectual way to deal with the boy problem in our churches—the suggestions in these pages may be adopted in whole or in part. Nothing here is mandatory. In response to a felt need we have simply brought together some ideas that we trust may prove helpful to those that are asking the question, "What shall we do with the boys?"

CHAPTER II

THE BOYS' CLUB

Is a Boys' Club Needed?

THE boys' club is already among us. Sometimes it meets in a cellar with a couple of sputtering candles for illumination. Sometimes its meeting-place is the street corner. I knew one club of half a dozen members which met nightly in a big packing-box in a back yard. Light was provided by means of a single tallow candle, but the boys enjoyed their club-house as much as the members of the Athenæum enjoy theirs. Alas, one night a watchful policeman spied a tiny ray of light that filtered through a crack in the box, and the club was clubbed to death.

The gang is the most dangerous form of the spontaneous boys' club. The spirit of adventure which is fanned by the sights and sounds of the busy city streets and urged into "daring" by the praise of the gang, leads the boy into undreamed-of dangers and almost inevitably into conflict with the law. The problem of crime is the problem of our youth. We may allow boys to run wild and garner such sickly amusement as they can, exposed to continual danger and

temptation, or we may utilize the gang spirit, draw the boys into a club where their imagination and their energy may find healthy scope and wise direction.

How to Catch the Boy

Among my acquaintance there is an anæmic young lady of excellent character and genuine piety who has a class of boys, children of Christian parents, in the Sunday-school. She is deeply interested in the Bible, especially in the mystical interpretation of it, and she does her fervent best to arouse the slumbering spiritual germ in the unregenerate hearts of her young charges. There is apparently little response. They wiggle in their seats through the interminable lesson; they work physical damage on each other by means of pins cunningly concealed from the teacher; they even take delight occasionally in bringing pepper with them to test the olfactory sensibilities of their companions.

The teacher does not catch those boys, because she is using the wrong bait. Fishing for boys is just as scientific as fishing for trout. The gentle angler must not consider his own tastes at all, but the tastes of the trout. He knows that unless he has the right bait he need never hope to land a speckled beauty.

In front of my home there is a large sheet of

water which in winter forms an admirable skating-pond for the boys. Every afternoon a young man,—he is six feet tall,—a Harvard student, appears on the banks and puts on his skates. How they know he is there I cannot conceive, but his arrival is the signal for the gathering of the clans. From every street within a quarter of a mile the boys flock to the pond,—little fellows too, five or six years old, —and they have the time of their lives. The tall student lets half a score of them hang on to him in a row, and they glide around the pond like a squealing serpent. He rolls with them on the ice. He tosses them into the air. He musses them up. And they are supremely happy. He knows what the boys want. He is only a boy himself, in spite of his size. And he wins them. They love him.

To win the boy you must love him, and understand him, and give him just what he is hungering for. He is a hero-worshipper, and you must be his hero. The sober, solemn, sombre, mirthless, unsmiling person is worse than useless in boys' work. To catch the boy there is one unfailing recipe: *Be a boy yourself.* Enter into his games and his fun. There is no other way.

How to Begin.

Your boys' club may be an elaborate affair, or

it may be as primitive as the gang. While you are feeling your way, a simple form may be the best.

Invite a few boys to come to your room one evening. Suggest to them the idea of forming a boys' club, with a regular membership, a constitution, by-laws, and what not. Sketch for them some of the things that a club may do, such as camping, Saturday-afternoon excursions into the country, sloyd, or other manual work, or whatever appeals to them. Talk the project over with them. Let them understand that you are not going to do something *for* them,—boys hate to be patronized,—but that you are willing to work *with* them, and have good times with them, if they wish.

At this meeting the club may organize. Let the boys appoint their officers, president, vice-president, secretary, treasurer, and so on. Make plenty of officers. Most boys will want to hold office of some sort. Appoint a committee to bring in a constitution at the next meeting. (Another form of organization will be found described in a later chapter, which, if adopted, would make the manner of procedure a little different.)

If you have no better place, your own room will make an excellent clubroom, although not an ideal one. The church may possibly furnish a room for meetings. Where much club work

like sloyd, manual work, athletics, drills, or Indian-club exercises, is aimed at, it is evident that commodious quarters must be secured. But remember that the appearance of the place of meeting has little weight with the boy. An old barn will be as good as a palace in the eyes of the boys if they really want a club. Procure the best premises you can, but do not give up the idea of having a club because you cannot get as comfortable quarters as you would like, or because you cannot do as much work as you wish.

The Equipment.

The equipment will depend on your ambition, on the kind of work that you can do, on your clubrooms, and on the length of your pocket-book. A clubroom or meeting-place you must have. The furniture should be plain and strong, so as to give the boys some degree of freedom. Do not use upholstered seats at all. You will want tables for indoor games, and you will want the games themselves. The size of the tables will depend on the games you can supply.

No club is complete without its library, and so you will need a bookcase. One or two of the boys should be made responsible for the care of the books and magazines. You will probably find people who will be glad to give you the leading magazines each month, and the

books will come as gifts or as the result of the club's work.

Whether or not you have a gymnasium, you will need some equipment for sport. The boys will practise and play in the open air, if they cannot get the use of a basement. Dumb-bells you will find indispensable. Weight-lifting will be found interesting and useful. Indian clubs will be appreciated. If you can have fencing, either in the basement or in the open air, the boys will enjoy it, and the foils or canes are not very expensive.

Another item which must on no account be overlooked is the heating and lighting of the rooms. A hot, badly ventilated room is a death-trap from which the boys will go out into the raw night air and contract colds and other troubles. On the other hand, draughts must be carefully avoided, or the consequences may be equally disastrous.

See that the room is at least well lighted. There is nothing more depressing than a dismal, poorly lighted hall. Electric light is the best illuminator, as it is cleaner than gas and keeps the air of the room purer. Besides, it can be installed in such a way that a tricky boy cannot tamper with it.

Color plays a large rôle in the life of a child. Offer half a dozen children their choice of varicolored sweets, and the highly tinted variety

will disappear first. This means that attention must be paid to the kind of wall-paper one uses. It need not be "gay," but it should certainly be chosen with care and taste.

Spend money on good pictures. Discourage the cheap print. Of course, you will have pictures of sports, rowing, running, swimming, football, baseball, and so on. By and by you will have baseball and football teams. They will surely be photographed, and the picture must have a place on the wall.

The Money Question.

The type of club of which we are speaking will not call for large expenditure. When hundreds of boys are brought together, the matter of expense becomes serious, as rent, lighting, equipment, upkeep, and such things easily run into the hundreds of dollars. But a club connected with a Junior or an Intermediate society can be conducted more economically.

In starting a club some support may be got from friends interested in boys' work. It should not be difficult to get a few to pledge the modest amount necessary to cover the first year's expense. But even if there be no money backing, a club may be started and carried on by the boys themselves.

Do not make the mistake of coddling the boys, doing everything for them, carrying them

in your arms, giving them everything they need. They will appreciate any piece of equipment far more if they are obliged to work and pay for it. Let them pay regular dues. If they need a football, a baseball, bats, games, let them raise the funds by doing some work, such as running errands, or by each starting with a capital of five cents and trading with it.

The Name.

There is much in a name. Let the boys take a week after the club is organized to think of a name for it. Let each come with a suggestion, and let the members discuss the names and decide which one they want. We have heard of "The Lotus Club," "The Yellow Kids," "The King's Boys," "The Success Boys," "The Patriots," "The Pilgrims," "Clean-Street Aids," "The Hope Boys," "The Raiders," "Searchlights."

CHAPTER III

ORGANIZATION

Graded Membership.

HAVING settled the question of the kind of club you wish, the matter of membership must receive attention. You may have a close club, for the members of the Junior or Intermediate societies alone; or you may give your activities wider scope and make the club the means of reaching out to boys that are not interested in either society. This is the better way.

The idea of a graded membership is one that is winning favor in our day. It has certain decided advantages. It gives the boys something to work for. Something ahead of them beckons their ambition. Let us suppose that the name of the organization is "The Boy Life-guards." The membership may be graded like the "Boy Scouts," as follows:

1. *Tenderfoot.*
2. *Second-class Life-guard.*
3. *First-class Life-guard.*

Conditions and Tests.

1. *Tenderfoot.* In order to become a tenderfoot the applicant should be put through some simple tests. These may be varied ac-

cording to the age of the boys and the local need. The following suggestions may be adopted in whole or in part. The tenderfoot

(*a*) Must know the Life-guards' Pledge by heart.

(*b*) He must know the main facts of George Washington's life.

(*c*) He must do some definite piece of work, tie at least four different knots, present an article made by himself, or a drawing executed by himself, or he may recite a poem, selected by the superintendent.

An age limit should be set, and none below it should be accepted as members, although in certain circumstances they may be permitted to attend the meetings and take part in games and outings.

2. *Second-class Life-guards.* After a life-guard has belonged to the club at least one month he may pass the tests for the next grade, second-class life-guards. The following will be found helpful :

The second-class life-guard

(*a*) Must have at least fifty cents in the savings-bank.

(*b*) Must present a definite piece of work done by himself, the superintendent or chief life-guard naming the requirement.

(*c*) Must know the history of the Stars and Stripes.

(*d*) Must be able to distinguish four kinds of trees, describe their bark, foliage, leaves, flowers.

(*e*) Must know the sixteen principal points of the compass.

(*f*) Must have elementary knowledge of first aid and bandaging.

(*g*) Must name and describe by form, color, habits, and call four wild animals.

3. *First-class Life-guards.*

The first-class life-guard

(*a*) Must have served as a second-class life-guard for at least three months.

(*b*) Must have one dollar in the savings-bank.

(*c*) Must know the elements of signalling.

(*d*) Must have an elementary knowledge of the semaphore, the Morse or Myer alphabet.

(*e*) Must know and tell how to act in a case of fire, and how to save the life of a person nearly drowned.

(*f*) Must know and describe at least six kinds of birds, their color, habits, and call.

(*g*) Must be able to describe with fair accuracy the contents of two shop windows after looking at them for one minute each. (This applies only to cities.)

(*h*) Must train and introduce a tenderfoot to the club.

(*i*) Must (in cities) know the location of fire-alarm boxes in the district where he lives, and tell how to ring in an alarm.

The Motto.

Let the boys choose a motto for the club. Suggest a number of good ones and explain them. Thus: "Be Prepared"; "Duty First"; "Not to Be Served, But to Serve"; "Co-operation"; "Service Is Joy"; "Head, Heart, and Hand for Others"; "Never Give Up"; "We Do"; "Work, Play, Learn, Laugh"; "Be True to God and Yourself"; "Build Strongly"; "Kindness Is Greatness"; "Don't Worry, Work"; "Do Right"; "Boost"; "Get Busy"; "Do It Now"; "Happiness Is a Habit"; and so on.

The Pledge.

"Trusting in the Lord Jesus Christ for strength, I promise Him that

"1. I will always try to do my duty.

"2. I will try to be helpful to others.

"3. I will obey the rules for life-guards."

Sign and Call.

The ingenuity of the superintendent may be exercised in devising a secret sign for the boys —a secret grip like the Free Masons', which the other members will recognize.

In the same way the club may adopt a general call—the call of some animal or bird. If the club is later divided into squads or teams, it is well for each team in addition to the

general call to have a call of its own. Some clubs find a bugle-call helpful, especially when spending a day in the country.

The Badge.

Three button badges should be used, one for the tenderfoot, one for the second-class, and one for the first-class life-guard. The badges should be of different colors, and each one should contain the club's motto.

If a motto badge cannot be procured, a button with some simple design will do instead. The design should have a symbolical signification and should remind the boys of some duty.

The Boy Scouts use cloth badges that are worn on the left arm, above the elbow.

When a boy leaves the club, he must give up his badge to the superintendent or chief life-guard. And when a boy is expelled from the club he must also give up his badge. The badge must always be the property of the club.

The Life-guards' Rules.

1. *The life-guard must be truthful.* No life-guard must ever tell a lie. When he says "that a thing is so, it is so." When he makes a promise, he must do everything in his power to keep it. If he breaks this rule, the chief life-guard through the Life-guards' Court may

take away his badge and expel him from the club.

2. *The life-guard must be ready to help others.* We are in this world to do good. A life-guard must not only be ready to help and serve others when he is asked, he must be on the lookout for opportunities to do a good turn. He must never let a day pass without having helped somebody in some way. Enforce this rule strongly.

3. *The life-guard must be an example to others and a brother to all.* He must not be proud or haughty. He must never look down on any because he is richer or better educated than they are. If he has anything that others have not, he should show that he is better by noble and gracious deeds.

4. *The life-guard must be a friend to animals.* He must never kill for sport, but must save animals from needless pain as far as he can.

5. *The life-guard must be polite, especially to women and children, to old people and to cripples.* And if he help any one, he must not take any reward for his services.

6. *The life-guard must obey his parents and the chief life-guard, and also the club officers when on duty.* He must not complain and ask why he must do this or that, but *obey.* He may ask the reason afterward and state his objections.

7. *The life-guard must never use bad language.* He must look pleasant under all circumstances, no matter what they are. Keep smiling.

Officers.

A small club may be carried on successfully without any officers at all, the personality of the superintendent supplying the cohesive power. But, generally speaking, the appointment of officers will add not only to the stability, but also to the efficiency, of the club, and the boys' interest in it will be increased.

A simple yet effective form, is the following:

1. *The chief life-guard*, who in all cases shall be the superintendent.

2. *A captain of a company*—one of the boys. The company shall consist of from five to ten boys. Divide the club into such groups, beginning with five boys in each group, and letting each group grow by accretion until it numbers ten. It may then divide, and the two sections become independent companies. But this should not be made a hard and fast rule, as there may be reasons for keeping a group of boys together.

3. *A lieutenant.* He shall be the captain's assistant and understudy.

Other officers may be appointed, a corporal, for instance, and work provided for them. The

pastor should have the position of chaplain or honorary chaplain.

The Constitution.

The constitution should embody the entire plan adopted. It should express the desires of the members, and therefore the boys ought to adopt it article by article. Provision should be made for having it changed, since experience will probably suggest alterations as time goes on. The outline given below is not mandatory, but suggests lines on which a constitution may be built.

CONSTITUTION

ARTICLE I

Name

The name of the club shall be "The Boy Lifeguards."

ARTICLE II

Object

The purpose of the club shall be to train the members physically, mentally, morally, and spiritually.

ARTICLE III

The Pledge and Motto

The club pledge shall be:

"Trusting in the Lord Jesus Christ for strength, I promise Him that

"1. I will always try to do my duty.

"2. I will try to be helpful to others.
"3. I will obey the rules for life-guards."
The club motto shall be, "We Do."

ARTICLE IV

The Colors

The club colors shall be red and white.

ARTICLE V

Membership

The club shall have three classes of members: tenderfoot, second-class life-guards, and first-class life-guards.

1. *Tenderfoot.* Any boy above the age of ..... years who has learned the club pledge and understands the club rules, and who has passed the tenderfoot tests, may become a member upon a majority vote of the club.

2. *Second-class life-guards.* Any boy who passes the tests for second-class life-guard after having served as tenderfoot at least one month may become a second-class life-guard on the recommendation of the examination committee and the decision of the chief life-guard.

3. *First-class life-guard.* Any boy who passes the tests for first-class life-guard after having served as second-class life-guard for at least three months may become a first-class life-guard on the recommendation of the examination committee and the decision of the chief life-guard.

4. When voted to membership the tenderfoot shall sign the constitution and the pledge.

5. When a member is absent from four consecutive business meetings of the club, which shall be held monthly, his name may be removed from the roll unless he can give good reason for his absence.

ARTICLE VI

Officers

1. The officers of the club shall be chief life-guard, assistant life-guard or life-guards, secretary, treasurer, and chaplain.

2. The chief life-guard, assistants, and other officers, together with the captains of companies, shall constitute the executive committee. The secretary and treasurer may be chosen from among the captains of companies.

3. The election of elective officers shall be by ballot of the club.

4. The term of office shall be ..... months.

ARTICLE VII

Duties of Officers

1. The chief life-guard presides at meetings of the club and has general superintendency.

2. In the absence of the chief life-guard an assistant life-guard shall preside.

3. The secretary shall keep a record of all business meetings of the club, and a list of names of members; he shall call the roll at such periods as shall be agreed upon, and shall undertake whatever correspondence is necessary.

4. The treasurer shall keep an account of all money received by him, shall collect dues from members, and make regular reports of its finances to the club.

5. The chaplain shall conduct whatever religious exercises may be deemed needful.

ARTICLE VIII

Committees

The executive committee shall have power to appoint committees for each term. There shall be at least

(*a*) *A membership committee*, the duties of which shall be to present names for membership, to arrange with prospective members for the necessary tests, and to visit absent members.

(*b*) *A property committee*, which shall have charge of the property of the club. This committee will see that the rooms are kept in proper order, are open in good season for the meetings, and are kept well lighted and ventilated. This committee shall maintain order in the rooms.

(*c*) *A social committee*, which shall arrange for socials as agreed upon for the club.

(*d*) *An examination committee*, to examine applicants for membership.

(*e*) Other committees may be appointed as desired, such as educational, athletic, and so on.

ARTICLE IX

Meetings

The club shall hold its regular meetings..... Special meetings may be called by the chief life-guard at any time. Meetings for the election of officers shall be held the first ..... in October and the first ..... in May.

ARTICLE X

Discipline

1. Any boy that misbehaves, that disobeys the by-laws or the Life-guards' Rules, shall be tried by the club court, which shall determine his punishment.

2. The club court shall consist of the chief life-guard, his assistants, and the captains of companies.

ARTICLE XI

Dues

The club dues shall be ..... payable weekly.

ARTICLE XII

Amendments

The constitution may be amended by a two-thirds vote of the members present, provided written notice of the amendment has been given two weeks in advance.

CHAPTER IV

DISCIPLINE

The Weak Spot.

THE weak spot in many a club is the fact that rules and regulations are made *and not enforced.* It is indeed no easy matter to make rules and adhere to them impartially, yet it is absolutely fatal to success, on the one hand to allow the boys, through lax good nature, to override the rules, or on the other, through personal attraction, to administer the law with partiality. If you have a rule that prohibits a boy from throwing checkers around, and you tell a new member, as a checker-board is handed to him for a game, that he must observe this rule, he will hear you with respect, and will very likely obey. But if he sees other boys throwing the checkers around without any punishment following, he will grow bold, and will imitate them.

The Making of Rules.

There should be a committee on rules. Let it prepare whatever rules may seem needful for the orderly conduct of the club. The rules need not be numerous, nor elaborate. It may

be found expedient from time to time to add to their number. But in every case let a proposed rule be presented to the club and adopted by it. Put the members on their honor. Cases of alleged violation will come before the club court in the presence of the club. In this way all the boys will be enlisted in a desire to keep order.

Rules to Make.

The rules should be simple. Some clubs embody the most important in mottoes which are hung on the walls. The boys must be told

1. That they must not use bad language.
2. That they must not spit on the floors or passages.
3. That property must not be damaged.
4. That gambling is absolutely forbidden.
5. That obedience to the officers is demanded.
6. That the spirit of the pledge and the Life-guards' Rules must be adhered to.

Punishment.

The question of punishment is a hard one, but one that the boys should clearly understand. For example, they should know that if they break the rules of the club they will be reproved and warned for the first offence. For a second offence they will be suspended, that is, denied entrance to the clubroom and participation in

the club sports, for one or two months, according to the gravity of the offence. A week's suspension does more harm than good. The boy can easily put in his time for a week, and does not feel any special privation by being excluded from the club. On the contrary, he will hang around and play the part of a martyr-hero in the eyes of the other boys. If there is to be punishment, it must be made effectual. If suspension does not cure the evil, then expulsion from the club must follow.

It is easy to state the general principle. It is more difficult to apply it in specific cases. Suppose a boy be accidentally struck by another, or that he meets with some slight accident in play, and under the influence of excitement loses his temper and expresses his feeling in unparliamentary language. Evidently a kind reproof is what is needed. This is not a case for the court at all. The boy may be reminded that the lack of self-control reveals a weakness in his character. Very likely he will be ashamed of his want of self-restraint. In the same way a boy without thinking may spit on the floor. He should be kindly told the danger of the practice. In other words we must use good, sound, common sense.

Damage to the property of the club must not be tolerated. The club will support the superintendent in this, since the members must be

made to pay the bills. *Nor must gambling be permitted under any pretext.* Expel the gambler without mercy. He will spread the leprosy throughout the club.

Beware of favoritism. When the boys see that some of their number are "let off" for any reason whatever, the knell of the superintendent's influence is rung.

In inflicting a penalty take pains to make sure that it is the sense of the club. One way is for the club court to consider the offence, adjudge a penalty, then submit their judgment to the vote of the whole club, a majority of the members present deciding the issue. It is well to have the members feel the justice of what is done.

Some Snags.

Some people may express the fear that if a boy is expelled from the club he will go utterly to the bad. This may be true in rare instances, although one might argue that such a boy would have gone to the bad even if he had remained a member. Who can tell? And would he not have dragged the club with him to the bad? "A little leaven leaveneth the whole lump." The danger in such cases we must face. Discipline must be maintained for the sake of others. Indeed, it may be that the disgrace connected with expulsion—for it should

be felt to be a shame—is the very impulse that the boy needs to make him pull himself together.

If an expelled boy comes to you, an experienced worker points out, and asks to be taken back, beware of saying, "I should be glad to welcome you back, but I must first consult with Mr. So-and-So." If this boy be refused readmittance, he will naturally bear a grudge against the gentleman named, who, he imagines, is the cause of the continued trouble.

If a boy be rebuked or punished by mistake and the mistake be discovered, never neglect to make a full apology—a public one if the rebuke or the punishment has been public, and a private one, by letter, if the rebuke has been private.

Judgment must be used as to the amount of liberty allowed the boys. It is fatal to pretend not to see if, in a modelling-class, the boys throw pellets of clay at one another, or in the sloyd class they throw chips of wood around.

Some good men and women fail as leaders because they have a pet weakness, which the boys soon discover and take delight in poking fun at. Just as a cat must run after a mouse, the instinct of the boy is to tease and make "mad" the other fellow. A bad-tempered person should never attempt work among boys. Gunpowder should not work with fire. A boys'

club needs a leader with a calm front, one whose will "goes," but who is nevertheless kind and courteous and just to all.

Do not suspect the boys. Do not let them feel that you are a policeman. Believe them; trust them; show them that you have confidence in them. If they deceive you and hide behind lies, punish them heavily. Let them feel the horror of lying. Watch the sneak and the tell-tale, the servile, fawning cur who is looking for favors.

Give the turbulent, high-spirited member something to do. Place responsibility on his shoulders. There is a way in which you can win every boy that breathes. Try to find that way. If a boy can draw, make him the club artist. Study the individual. And above all, keep sweet.

CHAPTER V

GAMES

What Games?

THE kind of games you will want if you have indoor club-meetings will depend upon your facilities for play, and also upon the age of the boys. There are good old standby games which you cannot do without—games that require but simple equipment. Books of games will suggest an endless variety for the social hours, games in which the entire company may take part. Such a book, if carefully studied, will make even a wooden superintendent a success. Try a new game each evening, and see the delight of the boys. In this connection I know of no better book than "Games for the Playground, Home, School, and Gymnasium," by Jessie H. Bancroft. (Price $1.50, sold by the United Society of Christian Endeavor, Tremont Temple, Boston, Mass.) It contains legions of the very best games, and will prove an invaluable help.

DOMINOES

This is an excellent game to have on the premises. Experience has shown, however, that it is one in playing which boys are sometimes tempted to indulge in gambling. Of

course, a good deal depends upon the kind of boys that are members of the club. Still, it can do no harm for the superintendent to keep a strict watch and see that playing for money is rigidly prohibited.

Checkers

This is a favorite game in all boys' clubs. It is, however, a game that needs a little fostering, and it is worth it. It is not enough to have the equipment for the game and allow the boys to use it when they desire. Interest will be aroused not only in the game, but also in the club, if you teach them the game and show them its fine points. Most towns have an enthusiast who will do the teaching for you. If you cannot unearth an enthusiast, get a book on the subject and study it yourself.

In connection with this game you may form a "Checker Circle," with officials chosen by the boys themselves. Still better, organize several circles or teams, so that you can get up checker matches between the teams. If you can get up a checker match between the best players in your club and the best team another club can produce, you may be pretty sure of arousing enthusiasm.

Chess

Chess may not be quite so popular among boys as checkers, but it will pay to cultivate

the game. Here again the services of an enthusiast may be utilized. Remember that the more people you can interest in the club and get to work for it in some way, the better are your chances for success, and the more recognition will you get for the work you are doing. Teams may be got up and matches played. A tournament may also be arranged to see who is the champion chess or checker player of the club. Give credit for such achievements. Give to the winner of the regular championship tournament in checkers and chess each a diploma, which may be hung in the clubroom.

Rings

This game consists in throwing rubber rings at numbered hooks fastened on a disc on the wall. It is a fine game for active boys to whom quiet games do not appeal. It lends itself easily to gambling, however, and should be watched. The boys may make the apparatus at small expense. Each player gets three throws at the hooks at a time, and the numbers on the hooks on which the rings catch (if they catch) are the score he makes.

Bean-Bag

There are a number of games played with bean-bags—that is, small bags three or four inches square, filled with beans.

Bean-Bag Board is played by throwing the bags through holes in an inclined board. A large hole is cut at the bottom of the board and a smaller one higher up. The players stand ten or fifteen feet from the board, which should be slanted by resting it against the wall, and each one tries to throw his bag through one of the holes. If the bag enters the large hole it counts five; the small hole counts ten.

Bean-Bag Box is the same game played with boxes. A small box about six inches square is placed in the centre of a larger one, which, in turn, is placed inside a still larger one. A bag entering the largest box counts five; the second box counts ten; the smallest box, fifteen.

The game may be played without the boxes, using chalk rings on the floor instead.

The Deer-Hunt

In the official handbook of "The Boy Scouts of America" a number of outdoor hunting games are given, suitable for active boys. One of the most interesting is the deer-hunt.

A fair-sized imitation of a deer is made from cardboard, or better still, from burlap stuffed with hay or straw, and stretched over a wire frame. A few touches of paint here and there help to make a tolerably real animal.

One boy carries the deer into the woods, marking his progress by a trail of corn, peas,

or other grain. He hides the deer among the bushes, but in such a way that it may be discovered. He is allowed a ten-minute start, after which the other players follow the trail and search for the deer. The one that finds it shouts, "Deer," and scores ten for his find.

On the side of the deer's body are drawn a bull's-eye and a larger circle. The boy that finds the deer must shoot at it with bow and arrow from the place where he first saw it, provided that this point is within reach. If not, he advances in a straight line to within ten yards. If he misses, another player is permitted to try. When the deer is struck, all the hunters must shoot from the place from which the successful shot was fired.

A shot outside the large circle is a scratch and counts two; inside the large circle it is a body-wound and counts five; the bull's-eye is a heart-wound, counts ten, and ends the hunt. If the game is played with a dummy, arrows that do not stick do not count, unless they pass through the body.

Bow and Arrow Games

The bow and arrow will suggest many games in which they may be used. There may be a rabbit-hunt, for example, pieces of burlap stuffed with hay making excellent rabbits. The rabbits are hidden, and the hunters, as in

the deer-hunt, search for them. The difference in the game is that each shot that misses counts ten *against* the hunter, and the boy therefore wins who kills the rabbit (an arrow that pierces it anywhere is considered fatal) with the fewest number of shots.

The Man-Hunt

This is a modification of the old game "I spy." One of the players, who has a small balloon tied on his back and is armed with a club made of straw, gets a five-minute start. He is supposed to be a fugitive from justice, well armed, and determined to sell his life dearly, or possibly to escape. If, indeed, he succeeds in holding off his pursuers for one hour and gets back to the starting-point with his heart intact, he wins the game.

He must use some kind of grain to make a trail. His pursuers, like himself, are armed with straw clubs. When one discovers the fugitive he may sound the alarm or tackle him single-handed. The player that discovers the hunted man scores ten, but the one that kills him scores twenty-five, so that some will prefer to try their luck alone.

The hunters must all wear hats that can be knocked off. If the fugitive succeeds in knocking off a hunter's hat, that hunter is considered dead, and is out of the game. Since the fugi-

tive's heart is on his back, it is not easy to conquer him single-handed. In "The Boy Scouts of America" there is a similar game called a bear-hunt.

Duck on the Rock

On a country road there is no more rousing game than this. Each player gets a stone about the size of a man's fist. This is his duck. A heavy stone placed in the centre of the road serves as a rock. The player who is "it" places his duck on the top of the rock, while the others, standing at a line about ten yards distant, and each throwing his duck in turn, try to knock the duck off the rock.

The stones of the players who miss the duck in their throw must lie where they come to rest. Each player is supposed then to keep near his stone so that he may take the first opportunity to lift it and run to the firing line. As long as a stone is on the ground the player who is it cannot tag its owner; but if a stone be picked up, and the player runs toward the line, he may be tagged, in which case he becomes it. When one lifts his duck, he may not replace it on the ground, but must take his chance of getting caught before he reaches home.

The player who is it, however, can tag the others only while his duck is on the rock. When it is knocked off, this is the sign for the others

to pick up their stones and fly for home. When the one who is it is smart he may quickly replace his duck and catch one of the others before the line is reached. No duck may be knocked off except by a fair throw from the line. Of course, any player may attempt to run to the line while the duck is on the rock, being liable, naturally, to be tagged.

Ball in the Cap

A popular game among boys in Scotland is played in this way. Each boy places his cap on the ground, preferably against a wall, the caps forming a close row. The players then stand at either end of the row, while one boy who is it takes a soft ball and goes back to a line drawn about five or ten yards from the row of caps.

From this position he throws or rolls the ball into one of the caps. The boy whose cap it enters runs forward, lifts the ball, and turns toward the other players, who meanwhile have run off as far as possible. It is permissible to hide behind any convenient object, if part of the body be visible, a hand, for example. Thus a boy may hide completely behind a tree provided he holds out one hand.

As soon as the boy who is it turns toward the others he cries, "Stop," and each one must stand where he is. The boy with the ball then

takes aim at the nearest, or at the one whom he thinks he can hit, and throws the ball at him. The boy who is struck becomes it, and he must not dodge the ball. If the throw misses, the boy who is it must again throw the ball into a cap, and try again.

Aunt Sally

The Scotch game of Aunt Sally is a favorite among the boys.

The boy who is it stands with his back against a wall, his right arm, with the hand open, stretched out at right angles to his body, the hand being held about one inch from the wall.

The other players form a line five or ten yards distant. The first one takes a soft ball and throws it at the outstretched hand at the wall. If he strikes, number two in the line gets a throw. The boy that misses becomes it.

CHAPTER VI

SPORTS

EVEN when a boys' club has not adequate equipment, many sports may be taken up. Saturday afternoon and holidays will afford ample opportunity for outdoor amusements. In every instance, however, capable leaders should be provided. There are young men in the Young People's society who will be glad to become physical instructors to groups of boys. Where proper control is absent, sport is liable to degenerate into mere horse-play, and sometimes quarrels started in the club are settled outside with bare fists and much wrath. The reins of discipline should therefore be held tightly, but kindly. The boys should be taught to be gentlemen in their play.

WRESTLING

A glance at healthy boys at play will convince one that it is instinctive with them to throw each other down in a test of strength and skill. When wrestling is introduced, its popularity proves that the boys like it.

A big, thickly padded mat is the only equip-

ment necessary. The teacher should either have mastered the art himself, or at least be familiar with the various "grips" and the rules of the game, as well as with the different styles of wrestling. The catch-as-you-can style, prevalent in several counties in England, is often rough work, and is not generally advisable. As the name indicates, the combatants seize each other "as they can." Victory is gained by pressing *both* shoulders of one's opponent to the ground. In the more graceful Græco-Roman style the wrestlers must take hold only above the waist. The Cumberland and Westmoreland style is the simplest and safest. Under these rules a fall occurs when a man touches the ground with any part of his body except his feet, or when he loses his hold, or when he falls underneath his opponent. Japanese style or jiu-jitsu may be made very entertaining, but will require special study.

Physical Culture

Dumb-bells, weight-lifting, and such matters will capture the boys. One of the best things to do is to organize a Sandow class. Tell the story of this strong man who began life as a puny boy. Then put the boys through a regular course of exercises, instructing them how to practise at home.

Every boy should be measured carefully,

height, breast-development, waist, upper arm (biceps), forearm, thigh, leg below the knee, and so on. A record of these measurements should be made on a separate sheet or page for each boy, and new measurements should be made every two or three months. The boys like to see progress.

In this connection it is a good plan to introduce one of the greatly advertised "developers." The boys must understand that physical culture is not fun, but hard work, and those that go in for it must be kept at it. As a rule the desire to develop muscles and strength will supply all the stimulus that they need.

Indian clubs give a fine form of exercise and should be introduced.

If possible, cold shower-baths and a vigorous rub-down should follow heavy exercise.

Hares and Hounds

The hounds and hares meet at a certain time, and one hare is sent out to lay the trail, small pieces of paper being used for this purpose. The pack follows the trail and tries to catch the hare, who has a short start in the race.

As a rule there should be two packs of hounds, a swift and a slow. The boy that falls out of the running becomes discouraged and gives up altogether. Put him in the slower pack, so that he will have companions.

Swimming

All the boys should be taught to swim. They should be taken to the water by a competent teacher who will choose a safe place and make it his business to see that every one gets a square deal. There is sometimes a tendency on the part of the bolder lads to play pranks on the more timid members. Rough fun should be strictly prohibited. The leader must see that no boy stays too long in the water. Swimming contests should be arranged and honor badges should be given for different feats, such as swimming one hundred yards, carrying a boy while swimming ten yards, and so on.

Sport Pointers

The boys enjoy walking and running feats. A walking-club for Saturday rambles is excellent, to which may be added some other interest, such as botany, geology, a study of trees, a study of birds, and so on. Quick-walking events should be planned, the boys being timed for 50, 100, 200, 400, 800 yards, or even one mile. Have races over similar distances. Running backward is sure to give great fun. A backward race on all fours is side-splitting.

Then jumping should be encouraged. Every variety: the standing high jump, with and without weights; the running high jump; the

running broad jump; the standing broad jump; the hop, step, and jump; the hopping race (on one leg); and so on.

The ancient game of quoits may be revived. Get heavy quoits and play on a soft clay tee. Dig up the clay and wet it slightly, but not sufficiently to make it muddy or to make it stick to the quoits. Only on such a tee can skill be developed.

Besides this there are throwing the hammer, putting the stone, throwing the disc, seeing who can kick a football farthest.

To Make a Fire with Two Sticks

Dr. Walter Hough of the National Museum at Washington has made a study of the different ways in which it is claimed that fire can be made by rubbing two sticks together.

The simplest method is the Polynesian. It consists of rubbing one end of a short, pointed stick along a groove which has been previously cut in a larger, flat stick, the latter being laid on the ground. The motion should be as rapid as possible. Presently a pinch of fine wood dust collects in the farther end of the groove, and this becomes incandescent, so that tinder brought into contact with it will ignite. The wood used must be of the proper kind. Black walnut will not do, for example, but dry and

soft maple is excellent, and is all the better if a bit rotten.

Another method consists of twirling the ends of a round stick in a hole previously made near the edge of a flat stick which lies on the ground. The dust thus ground off soon turns black, begins to smoke, and takes fire.

The pygmies in the Philippines use what they term the fire-saw. They draw a sharp-edged stick of bamboo swiftly back and forth across the convex side of a short section of bamboo stem, in which a notch has previously been cut. The wood dust thus ground off falls through the notch upon the tinder which has been placed beneath. Bamboo marrow is highly inflammable, and serves admirably for tinder.

Tracking

In many of the games which boys most enjoy, tracking, or following a trail, is a popular feature. In hounds and hares the trail is usually made by dropping small pieces of paper. In other games, where speed is not so important, the trail is made by dropping corn or grain along the path. But real tracking, seeing and recognizing the footprints of animals, following them, and interpreting the signs, is altogether another matter.

There are many works on tracking which go into details and contain illustrations of the

footprints of the different animals. Such books should be consulted by any one who expects to gain proficiency in the art. "Tracks and Tracking," by Josef Brunner, is perhaps as good as any. (This book may be obtained from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass., price $1.25.)

This author divides the animals in whom the huntsman is interested into four groups. The first, which includes the deer, ox, bear, dog, and cat families, is made up of animals the length of whose bodies is proportional to their height.

The second group includes rabbits, squirrels, and other animals whose hind legs are very long in proportion to their fore legs.

The legs of the animals of the third group are very short in proportion to their bodies, the marten and the mink being good examples.

The fourth group embraces animals whose legs are very short in proportion to their bodies, which at the same time are disproportionately thick. To this class belong the beaver, the badger, and others.

The footprints left by a given animal differ according as it has been going at a walk, a trot, or a gallop. This difference is accentuated by the difference in the length of the legs. When, for example, a hoofed animal is walking, four distinct footfalls may be heard. When it is trotting only two are heard. In

the gallop, which is simply a series of jumps, the fore feet are placed nearly side by side, while the hind feet stand behind one another on the trail. The reason is that the fore feet are used as stays, while the hind feet act as propellers.

The animals of the second group are always on the leap when travelling, so that the hind feet are always ahead of the fore feet on the trail; and as the hind feet are larger than the fore feet they are easily distinguished.

The animals that comprise the third group also move by leaps, but as the limbs are shorter the hind feet do not show so far ahead of the fore feet as the animals of the other group. Ordinarily the hind feet tracks cover those of the fore feet, but as speed increases this picture changes a little.

The members of the fourth group walk and leap, but their short legs make the tracks quite distinct.

Besides the character of the tracks, of course, much must be learned about the habits of the animals and the signs that they leave in the woods. The study is a fascinating one which will supply themes for conversations with the boys on many a woodland ramble or walk through the forest.

It is a pity that most of the sport of tracking is connected with the desire to kill. It is need-

less to say that this lust to kill the wild creatures of the woods should not be encouraged in boys. All the excitement that can be got with a gun can be got with a camera; and infinitely more skill is required to take a picture of forest life than is required to let off a gun. Prof. Goldwin Smith once shot and wounded a deer. It turned its tender brown eyes upon him, as it lay wounded and bleeding on the ground, with a reproach so keen that he never afterward handled a gun in the hunt.

CHAPTER VII

OPEN-AIR ACCOMPLISHMENTS

Archery

Archery reached its fullest development in England in the days when Robin Hood and his merry men terrorized wealthy travellers who passed through Epping Forest. In many an old-time battle the air was thick with arrows, each bent on its mission of death. The invention of gunpowder and firearms, however, which could be manipulated with much less skill and much more deadly effect than the long bow, put the bowman out of business.

As a sport archery has revived and is really worth while.

The Bow.

The easiest way is to buy a good bow made by a professional bow-maker. But this costs money. It is not a bad plan to let the boys make their own bows and arrows.

The best old English bows were made of yew. If this wood cannot be procured, then mulberry, sassafras, Southern cedar, apple, black locust, black walnut, slippery elm, mountain ash, hickory, and hemlock will do instead.

The bow should be as long as the person who is to use it is tall. Cut a piece of wood, absolutely straight, of the proper length. Mark off a piece of about five inches near the centre for a handle. Shave off the one side flat for the front, and the other side round for the back. Make the bow about one inch wide and at the handle about three-quarters of an inch thick. Taper it down to half this size at the ends.

At each end make a notch to hold the string. Put on the string now and pull it to see whether the ends pull back alike. If they do not pull evenly, shave off the thick end until both ends pull alike. The string should be tied securely to one end, and looped on to the notch at the other. The string should not be kept on the bow while it is not in use.

The handle, where the archer grasps the bow, should be made so that the upper part of it is about one inch above the true centre of the bow. In this way the archer grasps the bow a little below the centre. The handle should be covered with plush.

The best string is of linen. If this cannot be bought, twist unbleached linen thread together to the desired thickness, and use this. The centre of the string should be wound with resined silk for about five inches and a mark placed at the point where the arrow is to rest. The string should be shorter than the bow, so

that when strung it may be five or six inches from the bow.

The Arrow.

The arrow should be made of hard pine, and must be absolutely straight. It should be about three-eighths of an inch thick, and may either be of the same thickness for its entire length, or taper slightly toward the point, which must be fitted with a small pointed "pile" or ferrule, similar to those used on umbrellas.

An arrow which will not fly straight is worthless, of course, and as the flight is directed by the feathers at the end, great care must be exercised in placing them.

Feathers from a turkey's wing are best, but those of the goose are also used. For each arrow three feathers, which should be taken from the same wing, are needed.

With a sharp knife strip the mid rib of a good feather. Select a piece two or three inches long and glue it on the arrow at right angles to the notch for the string. This is called the cock feather which should always be away from the bow when shooting. It is usually marked or colored so as to be easily recognized. The other two feathers needed are glued on the arrow at equal distances from the cock feather, all of them being about one inch from the notch end of the arrow.

The arrow should be about twenty-five inches long, although there is no rule as to length. This will depend upon the length of a person's pull. Long arrows fly more steadily than short ones. The pull should always be to the same mark on the arrow. The arrow should be painted, partly to preserve it from dampness, which might warp it, and partly to make it easily seen when shot into a field or into the woods.

Other Necessaries.

You will want a quiver, which should be waterproof. If you are using a real longbow, which is quite a powerful weapon, you may wish an arm-guard for the left arm, which holds the bow. This is a leather article covering the forearm as leggings cover the legs, for example. It is meant to protect the arm from the blow of the string. The best archers say, however, that there is no need for the string to strike the arm, and that when this occurs it shows that the bow is not properly held.

The Target.

The target is made of plaited straw, and should be exactly four feet in diameter. It should be covered with canvas or burlap. Make a gold bull's-eye nine and three-fifths inches in

diameter, and around this paint rings of different colors, red, blue, black, white. Put these colors directly on the canvas. If you first paint the canvas white, the arrows will cause the color on top to peel off. In scoring, the gold counts nine, the red seven, the blue five, the black three, and the white one.

Position.

The archer does not stand facing the target, but with his left side toward it. If you draw a line from the target to him it should pass through both his heels. In taking aim the body is slued around toward the target, and the arrow is drawn back to the ear. The aim is taken with the *right* eye. If the sighting is done with the left eye the arrow will fly off to one side.

In pulling back the string do not grasp it between the thumb and forefinger. The thumb should not be used in this operation at all. The string is pulled back by the second and third fingers, slightly crooked, the arrow resting between the fingers. In letting it go the fingers are simply straightened. Do not pull and hold the bow bent. The strain is liable to break it. Let go *quickly* is the rule.

To begin with, place the target very near, say fifteen or twenty yards. Gradually move it backwards as confidence and skill are gained.

Forty yards is the proper distance. To make a score of fifty with twelve arrows is considered good shooting at this distance.

Kite-Flying

In Japan, China, and other lands, the art of kite-flying is not confined to children. Grown men and women pride themselves on their achievements. Even in this country there are kite enthusiasts. They do not run on the common or in the meadow trying to fly the old-fashioned diamond kite, but devise new and wonderful forms which they can send up to almost any height.

Humble kites have been used in the interests of science. They have been sent up with scientific instruments attached to them, and in this way we have learned not a little about aërial conditions at great heights. Since the advent of the air-ship the kite has once more come into the public eye, and at least one Massachusetts boy has gained for himself national fame by his expert knowledge of the art of flying kites.

The ordinary boy loves to fly a kite. Your boys' club will soon catch the fever, especially if you make a club kite, or have kite teams, each team striving to do better than the other. Kite contests are great fun.

It is best to begin by teaching the boys to make the simplest form, the diamond kite.

"The Outdoor Handy Book for Playground, Field, and Forest," by D. C. Beard (may be obtained from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass., price $2.00), contains more information about kite-making than you will be able to use. If you wish, you may get up a kite-making contest, to see which boy can turn out the kite that will fly best.

From the diamond kite you will pass on to some of the more difficult forms. Kites can be made which it is possible to steer. If you cannot hitch your wagon to a star you can hitch it to a kite, which makes an excellent motor power. In winter the boys may even attach their kites to a sled and go skimming across the snow. Besides, there is no end of pleasure in making the many delicate toy kites that are common in the Orient.

The Aëroplane

Without doubt some boys will want to know how to make an air-ship or an aëroplane. There are books that tell how to do it so simply and so well that any teacher may undertake to direct and guide the boys in this work. "The Book of the Boys' Model Aëroplanes," by Francis A. Collins is an excellent guide. "How It Flies," by Richard Ferris, gives a bright sketch of the history of flying, and describes

plainly the scientific principles involved. These books may be obtained from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass., price $1.20 each.

Signalling

Signalling is as old as Adam and as new as the wireless, which is the most recent mode of sending long-distance signals by means of electricity. Visual signalling, however, means the sending of messages between two people at such a distance that the signs can be seen. The signals are usually made by means of flags, or a semaphore. In learning the system a short wand about eighteen inches long may be used, as the signals made in practice are usually read at short distances.

The United States Army uses, among others, two systems of signalling on land, first, signs based on the Morse alphabet, in which a single flag is used and waved backwards and forwards according to a certain code, and second, signs made by holding two flags in certain positions.

The Morse Code.

This table will give an idea of the code, the numbers in the third column, as will be explained later, showing how to wave the flag to indicate the letters.

Letters	*American Morse*	*Army and Navy*
A	·—	22
B	—···	2112
C	—·—·	2121
D	—··	221
E	·	12
F	··—·	1221
G	——·	2211
H	····	122
I	··	1
J	·———	1222
K	—·—	211
L	·—··	212
M	——	112
N	—·	11
O	———	222
P	·——·	1221
Q	——·—	2122
R	·—·	121
S	···	111
T	—	2
U	··—	112
V	···—	1222
W	·——	1121
X	—··—	2112
Numerals		
1	·————	11111
2	··———	22222
3	···——	11122
4	····—	22211
5	·····	22222
6	—····	12222
7	——···	11222
8	———··	11122
9	————·	11112
0	—————	22222

Abbreviations.

Besides the numbers for the letters of the alphabet there are some abbreviations used. The following letters stand for the words indicated, but the sign signifying "end of word" must be given immediately after the letter.

a . . . after	t . . . . the
b . . . before	u . . . . you
c . . . can	ur . . . your
h . . . have	w . . . word
n . . . not	wi . . . with
r . . . are	y . . . . yes

How to Use the Signals.

In signalling with the number alphabet there are one position and three motions. The position is with the flag, or wand, held vertically, in front, the person who is signalling facing the station to which he is sending his message.

The first motion is to the right of the sender. That is, he waves his flag down to the right, within a foot of the ground, and immediately returns it to its original position. This motion is numbered "1" in the alphabet.

The second motion is exactly the same as motion "1," but to the left side. It is numbered "2."

The third motion is downward directly in front of the sender, the flag being immediately returned to its original position. This motion is numbered "3."

The Juniors must learn the motions for each letter, and learn them so thoroughly that they will recognize the letter signalled, almost without thinking. This can be done only by practice.

To signal a word or a message, the sender proceeds as follows: Let us suppose he wishes to send the word "Go." He makes the motions for the letter "G"; that is to say, he makes motion number two twice (waves the flag to the left twice) and the motion number one twice (waves the flag to the right). A brief pause. Then the motions for the letter "O," namely, motion number two and number one. Then he makes the motion number three which signifies "end of word."

Other Signs.

Motion number three, it will be remembered, is made by moving the flag downward directly in front of the sender. In the following signs this motion is used.

End of word, 3.

End of sentence, 33.

End of message, 333.

Error, 12 12 3.

Numerals follow or numerals end, xx3.

Wait a moment, 1111 3.

Repeat last word, 121 121 33.

The spaces between the numbers are indicated by a slight pause.

The letters PG, followed by the sign for "end of word" mean "permission granted"; NG, followed by "end of word," means "permission not granted."

The Semaphore System.

Signalling by the number alphabet requires only one flag; the semaphore requires two flags, or one may use one's arms instead. The positions are shown in the following illustrations. The abbreviations before given are used in this system. Thus the semaphore sign for "A" means "after," when followed by the sign for end of word.

The following signals are taken from the "Manual of Visual Signalling, U. S. Corps, 1910."

Observe that in the first column the arm describes a circle.

In the second column two arms or flags are

used, the one being kept stationary and the other moving around one position for each letter, except in the case of J, which is a special sign.

In the third column note that one flag is kept level, the other moving around.

Some special signs are:

Full stop	A A A
Right	R T
Repeat	I M I
Very end of message	V E
Words in parenthesis	K K
Words underlined	L L
Message read	R D

The Dot and Dash Code.

The dots and dashes of the Morse code may be used in signalling with a single flag. Thus a dot may be made by a motion of the flag to the right; a dash by a motion of the flag to the left. The long dash "L" is made by holding the flag down twice as long as in making the ordinary dash.

The wide space, which occurs only between the dots, is made by prolonging the signal for the last dot for an interval of time equal to the time of an additional dot. The letter C would be made thus: Right, prolonged right, right.

Torch Signalling.

Either the dot and dash code as described, or the army and navy code, may be used in sig-

nalling with torches at night. The motions are exactly the same as with the flags, torches being substituted.

Lamp Signalling.

The army and navy code may also be used in signalling by night with a lamp, the motions being the same as with flags. The dot and dash system may also be used, short flashes for dots, long flashes for dashes. Place the lamp in a bucket. Lift it up and replace it rapidly. This will make a flash equal to a dot. For a dash hold it in view a little longer.

CHAPTER VIII

NATURE STUDIES

Astronomy

Star-talks will be appreciated by the boys, and the information given will perhaps open up for them a world of delight. The superintendent should know something about astronomy, or secure some one capable of teaching the main facts. A chart of the heavens will be found helpful. This may be studied and compared with the night sky.

The starry sky seems to the common man but a confused mass of shining specks, which he is told are suns. So also it must have appeared to men in the days when the world was young. But even primitive man soon learned how to bring order out of this confusion. He recognized that certain stars shone more brightly than others. He grouped these together, drawing imaginary figures around the groups and giving them names taken almost entirely from fable and myth, the serpent, the bull, the bear, and so on.

These figures of serpents, bulls, and bears, are not made up of continuous rows of stars. One must draw imaginary lines from certain

bright stars to others, and thus form a rude outline which, with a little good will, we call a bull, or a bear, or a serpent, as the case may be. We continue to use these names and to think of these imaginary lines, for it is necessary to chart the heavens in some way, if we are to find our way among the labyrinth of the stars.

The Dipper.

Every American boy knows the Dipper, or the Great Bear. The name Dipper was given to this constellation because of its shape. In some countries it is popularly called the plough, on account of its resemblance to this instrument. Why it should be called the Bear it is not easy to explain.

Fig. 1.

In studying the northern heavens, the Dipper, then, forms an excellent point of departure. At all seasons of the year one may find it high in the firmament, toward the north. It has

seven stars which are marked, for handy reference, with the letters of the Greek alphabet, some of which are here given :

α...alpha...a	η...eta...e (long)
β...beta...b	θ...theta...th
γ...gamma...g	ι...iota...i
δ...delta...d	κ...kappa...k
ε...epsilon...e	λ...lambda...l
ζ...zeta...z	

Draw a straight line through the first and second stars in the Dipper, Alpha and Beta, and continue it a Dipper length beyond. (See Fig. 1.) The line will pass near a rather bright star. This is the pole-star or Polaris. The seven stars of the Dipper, and many others besides, revolve around the pole-star once in about twenty-four hours. For all practical purposes the pole-star is stationary. It was the guiding star of the ancient mariners, and it is ours too.

With the Dipper and the pole-star firmly fixed in our mind we can take journeys farther afield. Meantime it is well to remember that when one faces the pole-star one fronts the north ; the east is to the right, the west to the left, and the south is behind one.

The Little Bear.

Having located the pole-star, try to find the Little Bear. This is rather easy, as the pole-

star forms the end of his majesty's tail (Fig. 1). Between the Dipper and the Little Bear, however, there is "a winding procession" of small stars which the ancients called the Dragon.

Cassiopeia.

Draw now an imaginary line from the fourth star of the Dipper, Delta, through the pole-star, and continue it almost as far beyond the pole. The line will pass under a bright star which is the top of Cassiopeia (Fig. 2). If you continue this line beyond Cassiopeia, as far again from the pole-star, you will strike one of the stars in the Square of Pegasus. This bright square is then easy to locate.

Fig. 2.

Now look downwards and you will see two other bright stars. They form Andromeda. And continuing in a half-circle, in the direction

shown in the illustration, you will find a group of three stars. This is Perseus. From Delta in Perseus draw a line south and you will pass near the Pleiades, popularly known as the seven sisters.

A New Search.

Suppose we now return to the Great Bear and start from the other end of it (Fig. 3). If you draw a curved line beginning with the first star of the handle of the Dipper, Zeta, and pass through Eta, you will come to a brilliant star, Arcturus, which is counted the first star of the Herdsman. Lines drawn through the stars forming this constellation make the picture of a diamond kite. Alongside the upper part of the Herdsman is a beautiful circle of five stars called the Corona Borealis, the Northern Crown.

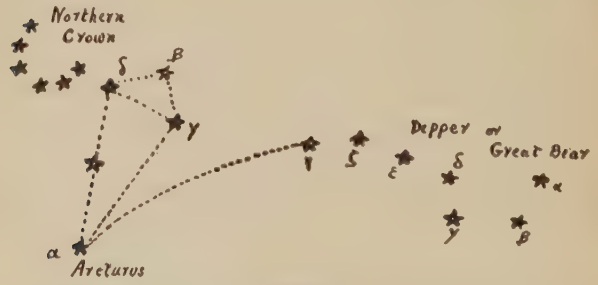

Fig. 3.

The boys may be taught something about the signs of the zodiac, maps being used for

this purpose. The southern constellations should be shown when they are visible. Get books like Flammarion's "Astronomy for Amateurs," or the works of Sir Robert Ball, which put the facts in an entertaining way. Flammarion's work may be obtained from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass., price $1.50.

The object should be to stimulate interest. People are blind to some of the most sublime facts of nature because no one has ever helped them to begin to see. The boy's natural curiosity, when he is convinced that the task is not a hopeless one, will push him into further study. It is ours to sow the seed.

Tree Lore

Our forests are an enchanted fairy-land for those that have been taught to see their marvels. Everywhere subtle signs tell interesting stories of what has happened in by-past times, if our eyes are sharp enough to see.

To some a forest is a dark and gloomy place, pretty in a landscape, but oppressive when one is in it. To others the trees have voices. They are friends. They carry their life-story almost on their faces. Knowledge of them opens the portals of a new world, a world of engrossing, bewitching charm.

There are a thousand things about the trees

that the boys want to know, and that they should know. An aimless ramble in the woods does nobody good. The secret of successful walking-parties is that the leader has a definite object in view. To take boys into the woods for a day will weary them, unless you can arouse their interest. I have never known woodcraft to fail to stir their imagination and to make them hungry for more knowledge. Point out some of the commonest signs and tell their significance, and you will find that the boys make discoveries for themselves and crave to know the meaning of them.

A Walk in the Woods.

We leave the dusty road and plunge into the cool forest. It is a new world. Instead of green grass beneath our feet we are now treading brown and springy mould. Why does the grass not grow here? Look up. The crowns of the trees form a leafy canopy that excludes the sunlight, and grass needs sunlight. Over there in that clear space, where the light falls in a golden shower, bramble-bushes have planted a thriving colony. They are the weeds of the forest. But they need sunlight too, and they cannot thrive where the light is kept out. That is a hint worth taking.

Now look at the trees themselves. They are thick-stemmed, a fact which indicates that

they are old. Here is one that has been cut. Glance at the trunk, and notice that it is formed of a great number of rings. Can you count them? Beginning at the centre and counting outward we find ninety rings; that is to say, this tree is at least ninety years old, probably two or three years more, for each ring speaks of one season's growth.

A close look will show that the rings are not all of the same width. Near the centre they are rather narrow, but as we go on they grow broader. What does that mean? It shows that at first the tree was weakly. The reason probably is that it was crowded and did not get sun enough. There are plenty of other trees around us in exactly the same condition, long, slender, struggling up to the sunlight. By and by this one pushed its head up into the light, and then it began to thrive as the broader rings indicate.

Every one knows that trees bear seed. What has become of the seed that these trees have borne through all the years? Some has been eaten, of course, by animals, the industrious squirrel being responsible for much of it. But why is not the ground literally thick with trees from the numberless seeds that must have fallen?

First of all, seed falling on the ground does not readily germinate. If a seed is to take

root, the ground must be scratched in some way, and the seed fall *into* it. But even if this happens, and the seed germinates, it does not follow that it will ever become a tree. As we have seen, trees crave sunlight; they must have it, too, or they will die. Hence many a seed that pushes its way above ground dies because it cannot reach the sunlight. Some trees need less sun than others. Those that you see growing in deep shade, tall, thin, delicate, belong to this class.

Again, leaves are the lungs of trees. Through them they breathe. The branches are simply convenient instruments for holding out the leaves to the air and the light. Next time you see an apple-tree notice how crooked its branches are. They twist in every imaginable way in order to catch as much sunlight as possible.

Now, in a crowded forest, the sapling pushes itself upward with all possible speed. The branches that it puts forth do not thrive for want of light. And when they fail to produce leaves they very soon die. This is the reason why you see long-stemmed trees. They have cleaned themselves of their branches as they grew.

Our Common Trees.

Books on forestry will give a wealth of detail into which space forbids us to enter. One

point we must touch upon, how to know our common trees when we see them. This is vital if the boys' interest is to be held.

First of all, the leaves are a good guide to the character of a tree. In fact, trees may be arranged with reference to the leaves, which form a key to the study. Roughly speaking, we have evergreen or cone-bearing trees and broad-leaved or deciduous trees. In this country all the cone-bearing trees belong to the pine family, with needle-shaped leaves, long or short.

In the pines, for example, the leaves are from two to five in a common sheath. The white pines have five in a bundle, yellow pines three in a bundle, while the Norway pine and the jack-pine have two in a bundle. The books will tell how to distinguish spruce, hemlock, and cedar.

Among the broad-leaved trees the beach, chestnut, birch, poplars, cottonwoods, elms, and so on, have the edge of the leaf toothed. The bark of the birch, smooth and whitish, is an excellent mark. The elms have a rough, dark-brown bark.

Another group of broad-leaved trees have the edge of the leaves lobed, the oak being a good example. With the aid of a book on trees it is fairly easy to place any tree in its proper class.

Butterflies and Insects

Possibly at first your boys will laugh at the absurd idea of studying "worms and bugs."

It is amazing how little ordinary people know about the abounding insect life that fills the earth in summer. The farmer knows the bugs that spoil his crops, knows and hates and fights them; the nature-lover has found, perhaps, the charm of discovery; but most people are blind to the beauties that flit past them on the breeze, or that they tread under foot in the sunlight.

Try some suitable chapters of John Burroughs's nature books on the boys. If the boys are alive, they will want to know more, and to study at first hand.

The best way, of course, is to get an enthusiast to go with you and the boys that wish to come, and show you how. A practical demonstration will certainly make converts. A visit to a museum where the boys will get an idea of the possibilities of the study, and get to know something of the insects, will prove a great help.

It is unlikely that the boys will each be able to make a collection of insects and butterflies, but all may join together to make a club collection.

The materials needed for the work are a net made of light gauze or mosquito-netting. This

is usually attached to the end of a long, light stick, so that the net may easily be slipped over the butterfly that you wish to capture.

The insects are so delicate that the slightest touch is liable to spoil them. The problem is how to get hold of them without damaging them. Most collectors employ this method: They procure a wide-mouthed glass jar, any size, fitted with a metal lid that screws on tightly. Several pieces of blotting-paper are then cut the exact size of the bottom of the jar. One of these is slipped in and pressed down until it lies flat on the bottom. On this is poured some chloroform, ether, benzine, or creosote, so that the blotter is thoroughly wet. Then a dry piece of blotting-paper is slipped in on the top of the wet one. Another piece is placed inside the metal stopper. Then the lid is screwed on tightly. The bottle is now ready for use.

When you catch a butterfly or insect, unscrew the lid and drop the captive into the bottle, when the fumes will instantly and painlessly put him to sleep. A little practice may enable you to get so close to your victim that you can hold the opening of the bottle above him and drop it over him without touching him at all.

Specimens.

The best way to preserve specimens is to dry them. This changes their shape somewhat, as

their soft bodies naturally shrink. Collectors have various methods which may be learned from the books.

The boys should make a cabinet for the collection. Let them make a flat box three or four inches deep, with a tight-fitting lid. Make a false bottom of cardboard about half an inch from the real bottom. In this false bottom cut out a large number of small holes into which you may fit corks. The butterflies, moths, or insects may be pinned on the top of the corks, and the corks inserted in the holes cut for them. This makes it possible for you to take out one specimen without removing any of the others.

The study becomes fascinating when there is a young man or woman who will take the lead. For Saturday afternoon rambles a butterfly hunt is excellent. In every instance, however, the habits of the specimens should be studied and mastered. There are whole tribes of them, numberless families that we may easily discover if we look for them. And when we find them we shall see that they are as distinct as Italians, Germans, or Jews.

Our Friend, the Bird

People walk blindly through life because their eyes have never been opened by those that see. They do not appreciate the hidden beauty of flowers, because no one has taught

them. They do not know the pleasure of bird-study because their attention has never been drawn to it.

Life is not all money-making. A boy who awakens to the marvels of the bird-world, who keeps in touch throughout the years with the wild creatures of the air, possesses a treasure that never fails to yield pure delight.

Not all boys will want to be bothered with the birds. The teacher will have to move slowly, perhaps. A walk in the country on Saturday afternoons, for a few weeks, however, may inoculate the boys with the fever. They can't be bothered because they have not as yet eyes to see.

The Object of Bird-Study.

The aim is to be able to recognize birds when we see them, to know something of their habits, haunts, and seasons, to discover how many species are to be found in a certain locality, and it may be to take photographs of them. Bird-study abolishes the youthful and barbarous desire to take life. We very soon learn that there is no need to kill the birds, that in fact there is far more fun in watching them, and in trying to get a snapshot of them.

How to Begin.

If there is a bird enthusiast in your town you

will have no difficulty. He or she will be more than glad to have the opportunity to start you on your way. For the novice, working alone, nothing is more bewildering than the apparent endless variety of birds. It seems hopeless ever to classify them. A teacher at this stage is a very great boon. As a matter of fact there are comparatively few groups for the beginner to master. Although there is great variety in the family or group there is a certain likeness which enables one to place the members of the tribe. The first steps will be the hardest.

From a teacher and from books (which the public library will supply) become familiar with the groups that are found in your own locality. If you can visit a museum and see the specimens, so much the better. If you cannot visit a museum, then study the characteristics of the birds from books.

Equipment.

Books, first of all. Those with colored plates, of course, are to be preferred. Frank M. Chapman's "Handbook of Birds of Eastern North America" is a good guide for that territory; Mrs. Florence Merriam Bailey's "Handbook of Western Birds" is fine for the West; Ralph Hoffman's Handbook is excellent for New England and the Middle States. Mr.

Chapman's work costs $3.00 and Mrs. Bailey's $3.50. Both may be obtained from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass.

Then it is well to have at least a good opera-glass. For elementary work this is all that is needed. As a rule one cannot get close enough to the birds to see their various points with sufficient clearness with the naked eye. But with a good glass this trouble is obviated. In the case of especially timid birds an eight-power binocular is a splendid aid.

What to Do.

Show the boys how to make observations in writing of all that they see on their expeditions. Short notes, which may be fully written out in a book at home, are enough. Do not imagine that interest can be kept up by just going out casually and hunting for birds. Begin with some system at the very outset, and you will find that this part of the game, that of recording one's finds, takes on absorbing interest. Thus when a nest is found, a note should be made of the exact location, the number and appearance of the eggs or the young, the material of which the nest is made, how it is made, any peculiar action of the parents, and so on. The date is important too. Also remarks about the condition of the weather.

Where to Begin.

Begin at home, and with the commonest birds. The crow, the sparrow, the robin, are old friends. But what do you know about them? Get hold of some facts. Ten to one you know little or nothing of their habits.

If you live in the city you will find many kinds of birds in the parks and even on the streets. A visitor in London says that there are twenty different kinds of birds so common in London that there is no excuse for people not knowing them. The first day he was in the city he saw a magpie nesting in St. James Park, and one foggy night he saw a gray wagtail asleep in the Mile-End Road, in spite of the noise of that busy thoroughfare.

One does not need to wander from the back yard to discover birds. If there is an orchard in the vicinity, there are sure to be plenty of our feathered friends around. But the stay-at-home student will miss much. To find the birds we must go afield and seek them.

Books on birds will tell something about the habits of the birds and thus indicate where we ought to seek. It is almost hopeless to go nesting unless we know something about the nesting habits of the birds whose homes we are looking for. Larks build their nests on the ground. The rose-breasted grosbeak is partial to a swampy growth of young maples, but will

build its nest also in dry thickets. Do not waste time by haphazard hunting. *Knowledge is ease and success.*

Nesting.

Birds' nests are usually cunningly hidden from human gaze. One may at times stumble upon them by chance, but the only reliable way to find nests is to do good hard work and search every inch of territory for them. If the bird for whose nest one is looking builds in an open space, two people may drag a rope across the field and cause the bird to "rise." If the nest is in a thicket the thing to do is to make a careful search. A long thin wand, carefully used, frequently starts a bird. One must not beat around bushes coarsely and noisily. The stealthy, cunning searcher is the one that will make the largest number of finds.

Winter Bird-houses.

In *The Junior Christian Endeavor World* George Ethelbert Walsh tells how to make winter bird-houses. He says:

"Our few winter birds need protection and feeding as much as our domestic creatures, but many of us are slow to understand this.

"The practice of erecting bird-houses for nesting-purposes is quite common in some parts of the country, but winter bird-houses are still better. If every one that lives in the country

would build such homes for the winter birds, there would be fewer tragedies on cold nights.

"A winter bird-house differs in some respects from a summer nesting-house. It must be constructed in such a way that snow and rain can be kept out of it.

"The reason why so few birds seek shelter in the ordinary bird-house is that it is a cold, dreary, draughty place. During snow-storms the entrance to it is practically closed.

"A winter bird-house should have double walls and a tin or other rain-proof roof.

"An ordinary box such as you can obtain from any grocery-store can be used. Fasten this to a square platform whose edges extend six inches beyond the sides of the box.

"Cut holes on four sides about the size of a small apple. Cover all of the holes with pieces of glass, except one, which should be left for the entrance. This entrance hole should be placed so that it faces east. Such a bird-home will do for summer.

"The home should be prepared for its winter inhabitants by fitting a larger box over the smaller one.

"This box should have window-lights in it, and only one entrance, which should face south. The outer box should come out even with the edges of the platform, which will leave a six-inch corridor inside.

"The advantages of this winter bird-box are plain. The south entrance is far enough from the inside entrance facing east to protect it from the drifting snow. If the birds once get inside of the outer box, they can find their way into the smaller box, which will be free from snow and rain. A bird-house that is built in this way will always have its winter tenants.

"Instead of nailing the two boxes to the wooden platform, screw them down with small iron braces. Then they can be removed easily, and the interior of the bird-house can be cleaned out.

"Birds appreciate clean, dry quarters as much as we do. They will not go into a house that is filled with dirty, wet hay and straw from last year. Every spring and fall the lover of birds should clean house for the bird pets.

"I have had as many as a dozen winter birds in one large box built after this fashion. Fresh, clean hay, cotton, and hair should be put into the bird-box before the cold weather comes on.

"Now there is a simple way of attracting the winter birds to such a home for them.

"Provide a liberal supply of wheat, cracked corn, seeds, and other food. Cover the inside room with the food an inch thick, and strew it outside in the corridor, and on a narrow platform outside.

"When the birds are hard up for food, they will discover the grain on the platform, and eat it. Then they will follow the trail inside, and discover the storehouse provided for them.

"They soon make the bird-box their home, and within a short time they will get into the habit of going inside on stormy nights.

"A bird-box should be placed near the house where one can get at it easily, if no house-cats are around, so that one can watch the pets and make their acquaintance.

"If there are cats around, there is another way. Erect the house on a tall pole which the cats cannot well climb.

"The birds will not take possession of a house put up near the windows if they see cats prying around. If the bird-house is nailed on the side of the building, a few feet away from the window-ledge, they will consider themselves safe from cats.

"I had such a bird-house erected on the side of the building half-way between two second-story windows, and directly under a window on the third story. I could feed the birds by dropping things from the third-floor window to their platform, and at the same time there was a chance to watch their antics from either of the lower windows.

"The bird-house could be reached by a ladder only, and the tenants never once distrusted me.

They held possession all winter, and on stormy winter nights I had the satisfaction of knowing that my wild pets were well housed.

"It goes without saying that the roof of the winter bird-house should be perfectly waterproof. I suppose the birds do not like leaky houses any more than we do.

"The best roof is made of sheet tin; and, if this is painted, it will last a long time and present a pleasing appearance to the eye. The tin roof should extend three or four inches beyond the sides of the house."

Flower Talks

Nothing will scare boys more surely than the word "study." They get enough of that, such as it is, in the day-schools. If, therefore, you propose that they shall study botany with you, they will scamper away to their play.

Yet botany may be made absolutely fascinating. The sugar coating that will make the pill go down easily is incidental talks on flowers plucked, apparently, casually. A peep through a microscope at some of the parts of the flowers will at once attract attention and prepare the way for the leader to tell the life-story of the particular flower. In this way the main features of some common flowers may be imparted without the boys' suspecting that they are learning anything at all. And one or two

stories of this sort are sufficient to arouse interest in flowers and grasses and trees.

The Sweet Pea and Its Story.

Suppose we begin with the sweet pea. The seeds are round, brown little objects like pills, and contain little promise of life. When they are placed in the ground they absorb water from the soil and begin to swell. In some mysterious way the action of the warm, moist earth awakens the sleeping life within, and they put forth tiny shoots which in the course of about a week push their heads above the ground.

Left to themselves the stems would lie prostrate on the ground and never come to anything worth while; but if you put an upright stick within reach the peas will throw out little tendrils and grasp this support, climbing upward to get as much light and air as possible.

The leaves meantime have been busy making starch. At night this starch is digested and becomes sugar, which is sent to all parts of the plant where growth is taking place. For starch is plant-food. The common potato, for example, is simply a storehouse for starch which the plant wishes to use at some future time.

By and by flowering-time arrives. The work of the leaves is to make food; that of the flowers is entirely different. It is to prepare for *more life.*

Here, for instance, is a sweet-pea flower. How beautiful in form and color it is! But it is interesting from other points of view. First of all, one observes that it is not regular in form as are many flowers. The blossom proper, that is, the colored parts, are called the *petals*, and a single look will show us that the petals are not all of the same shape.

Pull them apart and see how they look. The largest one is called the *banner*. That is because it is big and broad. The two smaller ones that stick out toward the sides are called the *wings*. There still remain two others, folded together. They are called the *keel*, because they resemble the keel of a boat.

But now look at this other pea blossom. Forget for a moment the names of each of the petals. All the petals taken together have a single name: the whole part is called the *corolla*.

Suppose we again pluck off the petals. The green part out of which they grew, cup-like in shape, is called the *calyx*. The upper leafy ends of the calyx (which is composed of leaves) are called the *sepals*. Remember these names. They are the same in all flowers.

Now look at these thread-like bodies. Count them. There are ten of them. They surround a boat-like body. They are named *stamens*. A closer look will show that at the end they are

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curved and slightly enlarged. This enlargement has a case that contains a fine powder named *pollen*. The *pollen-case* it is called.

If you try to take the stamens apart and follow their course down to the calyx, you will find that nine of them are joined toward the base. The flat, hairy part is the *pistil*. In a fresh flower it is too tiny to study. In an older flower it is more fully developed.

As the blossom ages, the petals wither, shrink, or fall off. So do the stamens. But the pistil remains; in fact, it grows bigger all the time. By and by we see that it develops into a pea-pod. The pod, as everybody knows, is a box designed to contain peas, or the seeds of the plant.

When the pollen is scattered from the end of the stamens some of it falls on the end of the pistil. We cannot tell how, but these fine grains begin to grow and form tiny tubes as fine as silk, which grow down into the pistil and enter the embryo pea. A pollen tube passes into each pea.

Now in each of the tubes there are what are called sperms, or life-germs. Nobody knows what these are, for all life is hidden, and we can see only its effects. The sperm enters the tiny pea and unites with its germ, or life-principle, thus giving new power and life to the germ and a new impetus for growth. The new germ be-

comes the embryo plant in the seed, which, when the pea is planted, will burst forth to form a new plant.

If the story is told in this fashion it will surely grip the imagination. Like Oliver Twist, the boys will clamor for more. One may then tell the life-story of the trees, or ferns, or mushrooms, or grasses. An excellent little book for elementary work is "First Studies in Plant Life," by George Francis Atkinson, which may be obtained from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass., price 60 cents.

The boys will notice the different shapes of the leaves, which will open the way to a discussion of this characteristic. The principal thing is to get the boys started. Natural curiosity and their thirst for knowledge will do the rest, under wise and inspiring guidance.

The Fern and its Story.

The boys should be encouraged to take a practical interest in ferns by making a fernery in some garden-plot. It is possible to gather a large variety of ferns, representatives of the various families. The place may be made picturesque by miniature rocks.

Ferns, as everybody knows, have neither flowers nor seeds.

But wait a minute. You may have seen

careful housewives turn over the leaves of their patient ferns and pick off small round or flat bodies that were sticking to the backs of them. Picking off bugs, they tell you.

But these objects on the backs of the ferns are not bugs at all. Suppose you pick a leaf when the little objects on it are nice and glossy. Rub them off the leaf and place them on a piece of white paper. In a short time—an hour, more or less—you will find a number of small dust-like bodies on the paper. These are called *spores*. They come out of the shiny objects or spore-cases, where they are carefully packed away. The things that the careful housewife thinks are bugs are, then, *spore-cases*.

Now let us see what happens to the spores in the living fern.

When the spore-cases are ripe, they fall off the fern into the damp ground, or, perhaps, into a rotting log. Here the spore bursts through the case and begins to grow. In a few weeks it grows into a curious heart-shaped form no larger than a pea, and delicate as tissue-paper. This object is called *fern prothallium*. On the under side there are small hair-like rootlets and two kinds of pockets. The fern plant grows out of the prothallium.

This is what takes place. In one of the pockets in the prothallium is a *germ cell*. In the other pockets are *sperms*. One of the

sperms slips into the pocket that contains the germ and unites with it, after which the germ grows into a fern plant.

Thus the growth of a fern is divided into two periods. First, the spore-case bursts, liberating the spores, which develop into the prothallium; then the germ and sperm in the prothallium unite and develop into the plant.

Ferns exist in great variety. Some are hardy and grow with little care; others are delicate and need special attention. The fern world is a world of rare beauty when we know where to look for it.

CHAPTER IX

ART STUDIES

Art Metal Work

The art of working in metal is at least as old as Tubal Cain, who, we read, was "an instructor of every artificer in brass and iron." Possibly his chief work was the making of weapons. Our aim is of a more peaceful nature.

Every boy with average manual ability can do art metal work. It is not so difficult as to be discouraging; in fact, the results obtained are tolerably sure to inspire to increased effort. For winter evenings there is nothing better than a class in this kind of work.

The Equipment.

For pierced work, which is both easy and pretty, the very simplest tools are needed: a wooden mallet or hammer, a sharp sticker or awl, for piercing, and a block of soft wood on which to work.

Repoussé work is more difficult and more tools are required. The word repoussé means "beaten back," and applies to ornamental work with raised figures. The general method em-

ployed is to chase out the outline of the figure with a sharp chasing-tool and then *beat back the background* with other tools.

When the boys have attained proficiency in pierced work they will doubtless wish to advance to this more artistic style. Books on the subject of art metal work are easily obtained at libraries, and the superintendent may either master the elementary principles himself or get some one to give a few lessons. "Art Crafting in Metal for Amateurs," by F. Alexander (price $1.50, from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass.), is a reliable guide.

Another point about this work is that when it is offered for sale at church bazaars it usually brings a fair price. In this way the funds of the club might be conveniently swelled.

How It Is Done.

The metals employed are usually gold, silver, brass, copper, German silver, and lead. For class-work brass is the most suitable. Small sheets may be purchased, cut into the proper shape for various articles, such as photograph-frames, blotters, ash-trays, lamp-shades, and so forth, and with designs ready drawn in outline, so that the worker has only the pierced work to do. Many will wish to "do it all," however. In this case sheets of rolled brass, very thin,

may be bought at hardware-stores, and the design may be traced on them. The brass may be procured at almost any width, but a very good size is fourteen inches wide, from twenty-eight to thirty-four gauge being the best thickness.

First of all the sheet must be cut to the proper shape, after which it must be flattened by striking it with a mallet. This is not so easy to do as it seems. The right arm should remain stationary so that the blows always fall on the same place on the anvil, the brass being moved after each blow. It is generally best to begin in the middle of the sheet and work toward the corners. If any inequalities remain after going over it once, cautious taps with the mallet around the spot will probably remove them.

The brass will probably have to be polished. This is done by rubbing it with oil and flour emery, or with metal polish.

The Design.

The design should, of course, first be drawn on paper. Then the question is how to transfer it from the paper to the brass. A simple way is to prick holes in the paper, following the outline of the pattern. Lay the paper upon the brass and daub it with French chalk in powder, or fine dry whiting, tied up in muslin.

The trouble with this method is that the chalk rubs off at once if touched.

A better way is to rub a piece of white wax gently over the plate, then warm the plate over or before the fire. This distributes the wax and covers the plate with a thin film, which when the brass cools easily takes on the design.

Or one may place the design on the plate and underneath it put a common blue carbon transfer-paper, such as typewriters use. Trace over the lines of the pattern carefully. Have a piece of cardboard under the hand while tracing, to prevent the fingers from leaving ugly marks. The drawing may be held in position by weights at the corners.

Piercing the Brass.

When the design has been transferred to the sheet, place the plate on the wooden block. You are now ready for piercing. The pick or awl is held in the left hand, straight up and down, and a sharp tap with the mallet drives it through the metal. It is necessary to see that the pick does not slip, and that the holes made are about the same size. Only the background is pierced, and as this drives it back, the pattern is left slightly raised. Great care must be taken to follow the lines of the figure. Mistakes cannot be remedied. When finished, a pointed stick like a pencil may be used on the

back of the sheet to push forward the raised parts of the pattern, thus increasing the effect.

Designs that show strong, clear outlines should be chosen at first. Small articles like photograph-frames give better practice for the beginner than larger objects. After the novice has mastered the tools he may try jardinières, fern-dishes, and such things.

Repoussé work is harder to master, but not too difficult even for boys, and its possibilities are greater than those of pierced work. Those that wish to pursue the study will find plenty of instruction in the books on art crafting.

Construction in Cardboard

If there are a number of young boys in the club you will find that they are interested in making articles in cardboard as a preparation for working in wood. The possibilities of this class of work are legion, and the manual training given is invaluable. The Juniors learn to use and to read the ruler from the very first.

The cardboard form is the basis of many articles of household use. Cardboard portfolios, frames, pocketbooks, and many other articles, are covered with leatherette or heavy book-cover paper, and are prized by the makers as samples of their skill.

Beginning with simple boxes the pupils are carried forward to more difficult tasks, such as

the making of toy cardboard furniture, chairs, tables, sideboards, houses, cradles, wagons, baskets, and such things.

Any one wishing to form a class for winter work among the boys will find full instruction in a little volume by Elizabeth Sanborn Knapp, entitled "Raffia and Reed Weaving," which includes cardboard and paper construction. The instructions are full and clear, and the diagrams are self-explanatory. This work may be got from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass., price 50 cents.

Raffia and Reed Weaving

This class of work, which is fully described in the work above referred to, is a splendid asset as an educator. The materials are cheap; the raffia, which comes in twists, costs only from fifteen to twenty cents a pound. There is no reason why boys should not be taught to handle it as well as the darning-needle used in sewing it together. Young boys will certainly take to it and will make mats, dolls, hats, baskets, and such things.

Reed-weaving will prove even more absorbing. The boys will be more than pleased to show their work and say, "I made that." Mats, trays, baskets of all shapes and sizes, offer a fine field.

Modelling in Clay

The instinct to mould objects in clay is the common possession of all children, as the universal love for mud pies abundantly proves. There should be no difficulty, therefore, in getting up a class for modelling in clay. It may be harder to find a good teacher. In the Christian Endeavor society, however, some deft-fingered young man or young woman may be found who will be willing even to learn the art in order to be of use to the Juniors.

The kindergarten has shown that very young children may be taught to work with clay, but for our present purpose boys and girls of about nine or ten years of age should be chosen.

At first a lump of clay for a body and four pins for legs completely satisfy the mind of the young child, and serve for cat, dog, horse, or hare. But as the child grows it begins to see that there is little resemblance between its crude efforts and the real animals. When it tries to get a better likeness and fails in the attempt, discouragement is liable to follow. It is best, therefore, to begin with children that have passed the artistic state of primitive man.

Clay-modelling is an education in form. It instructs the eye and develops the power to reproduce what the eye sees. That is to say, it calls for deft and delicate touch.

Then again, if the work be imperfect, it may

be remedied. Faults may be worked over, again and again. The material is soft and errors do not prove fatal to success. Besides, results are attained relatively quickly. There need never be any impatience.

The Equipment.

In a store that sells material for kindergarten work you may buy small wooden modelling-knives at a trifling cost. Each Junior will have his own knife, of course. For each one you will also require a roofing-slate about nine by fourteen or sixteen inches in size, on which to place the clay while working. The slate is far better than wood, which shrinks, warps, and spoils the clay forms. Flat tables or boards at least thirty inches long and sixteen inches wide, with a back strip to prevent the clay from falling over, are also necessary. Then there should be rulers, compasses, and triangles for careful work.

Some kindergarten stores sell a preparation to take the place of clay. Probably the best and cheapest material is the clay that is used by manufacturers of stone jugs and crocks. This may be procured at the potteries. Some wet the clay with rubber sprinklers. Others keep it and wet it in flower-pots.

It is well to have a wooden rolling-pin with which to roll the clay out flat, when desired.

To get it all of one thickness place strips of wood three-eighths of an inch thick at the sides of the clay. The clay may be rolled out on the wooden table or board, then placed on the slate, where it should be permitted to harden slightly before using.

Some clay thinned to the consistency of cream is used when building up forms to make parts that are added to the object stick firmly.

Method.

Begin with the simplest forms. Roll out some clay so that it forms a tile twelve or fourteen inches long and six or eight inches broad, or form it eight or nine inches square, if desired. See that it is of the same thickness all through. Give the Junior some simple pattern to trace on the damp clay. A little book, "Clay-Modelling for Schools," by Anna M. Holland (price 75 cents from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass.), contains a number of plates which suggest material for many lessons. A series of triangles forming a border is a good beginning. Thus:

Let the Junior now go over the outline, picking out holes in the clay with the round point

of his wooden knife, taking care to make the holes evenly and of the same depth. This is excellent practice to give control of the muscles of the hand. Then the entire centre of each second triangle should be entirely covered with these small holes. Various mathematical figures may be drawn and pricked out in the same way.

Then teach the Junior how to build up a pattern on his slab of clay. The pattern must of course first be drawn in outline. It should be drawn on paper and given to the Junior to copy in outline on the clay.

Then roll out long round strips of clay about as thick as a slate-pencil. Place them on the lines of the pattern that have been drawn, thus forming a raised outline. Then proceed to fill in this outline with clay to the desired height. This done, cut the edges down vertically. The pattern will then stand out boldly in relief. Begin this part with simple mathematical figures, such as triangles, interlocking circles, and such like forms.

Advanced Forms.

Then let the Junior try to imitate some natural object, a leaf, for example. The leaf should be kept before the worker, who will seek to reproduce it by building it up out of clay. Do not pat or squeeze the clay into shape. *Build with it.*

Do not be afraid of allowing the pupil to use aids in doing his work. Compasses and calipers for measuring should be used without stint. By and by the child will learn to depend on the eye alone, and measure for safety afterward. Besides, there will be curves enough to make that no instrument can measure, for which the Junior will perforce have to use his eye.

In making square tiles—and this is the best form to adhere to after the first exercises—*study the background.* Sometimes it should be left smooth. But at other times the effect will be better if it is marked in some way with the tool.

Vases and round work in general will be found harder to execute. They are modelled around a piece of wood which is used as a support. When the Juniors have reached this stage it will be well to procure an advanced handbook and study it along with them.

Pyrography, or Wood-Burning

In almost any department store the simple outfit necessary for pyrographic work, or the art of burning patterns in wood, may be purchased at a nominal figure. The common practice is to buy the wood with a pattern already drawn on it, and excellent results may certainly be obtained in this way. In a boys' club, however, the boys may wish to do it all

themselves. In this case maple, holly, cherry, common whitewood, or yellow poplar give excellent opportunities for fine work.

The wood must be cut into the shape of the panel or article to be made, and planed and sandpapered until it is as smooth as glass. Then the pattern should be pencilled in. Usually the pattern should first be drawn on paper and traced on the wood.

There are no limits to what may be done in the way of delicately artistic patterns. All that may be accomplished by pen and ink or pencil may be equally well accomplished on wood. The burning platinum point is capable of producing the finest lines or the darkest shade, and everything between.

How to Do It.

An ounce of experience is better than a pound of theory. A very little practice will show exactly how the tools should be handled. Fine lines are made by leaning lightly with the heated point on the wood and by not permitting it to come to rest. The slower the point moves over the surface, the deeper and darker the line will be. In other words, the way to make dark lines is not to lean heavily, but to move the point slowly.

The beginner will probably make little dabs or spots in the wood with the point of his in-

strument. Sometimes these may later be worked into the shading of the pattern, but if they occur in an open space the only thing to do with them is to try to rub them out by using a sharp knife, sandpaper, or a piece of glass.

Generally speaking, the best method is to go over the outline of the pattern and then fill in the ground. This may be made heavy by using the side of the style. Backgrounds may be made in many ways. One may use the method called hatching, that is, first drawing a series of fine lines in one direction and then crossing them with another series of lines at right angles. Another style much in vogue is to use the side of the instrument, making a rough, uneven surface.

Some workers varnish the wood after the pattern has been burned into it. Others leave it unvarnished.

Instead of wood, leather, velvet, and other cloths may be used. The method employed is similar in each case.

Whittling

The delight of a boy in working with a knife is proof that whittling will be hailed with acclaim. As a rule, however, young boys should not be taken into the class. They lack the control of knife and hand that is necessary to success and safety.

The outfit is very simple, good knives, suitable wood, and some sandpaper being the main articles required.

On the blackboard enlarged drawings of the article to be made should be sketched. It is essential that the children get a clear mental picture of the work they are to do.

The position of the Junior's body should be watched carefully. He may sit while cutting the wood, but while whittling, using the sandpaper, and so on, he should stand up. The wood must be held at the end nearest the worker, and cuts should be made away from the body. The whole length of the knife-blade should be used, drawing it through the wood as the cut is made. Sandpaper is meant to smooth the article, and not to reduce its dimensions.

Children will try their skill on a great variety of articles, paper-knives, swords, small shovels, boats, tables, wagons, and so on.

Sloyd

The suggestion that sloyd shall be taken up is made with diffidence, largely because the equipment is costly and the work is difficult. To teach efficiently one must have a miniature carpenter's shop, for one of the chief advantages of this kind of work is the training that it gives in the handling of tools.

The children should be taught how to read and work from drawings, although models should be shown them and explained to them, and hints as to methods of procedure should be given. The usual way is to let the children work from the model at first; then from the model and drawing; then from the drawing alone; and finally from the child's own suggestions guided by the teacher.

The teacher should know something about the various kinds of woods and teach the Juniors their qualities.

The tools used should be of the best quality. Children's tools are generally toys, and should be avoided.

An adjustable bench is a requisite, or at least a large, solid work-table at which several Juniors may work. A clamp vise, compasses, square, rule, planes, saws of different kinds, brace and bits, hammer, file, and so forth, must be procured. Also a sharpening-outfit, and a small grindstone.

A book on sloyd will give a full list of the tools required, and also directions for making a large number of useful articles. Among the many that are published we may mention "Elementary Sloyd and Whittling," by Gustaf Larsson, which may be procured from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass., price 75 cents.

Fretwork and Wood-Carving

Fret-sawing is more than a pastime, it is an art, and, associated with wood-carving, it unfolds splendid opportunities, not only for manual training, but for the development of the artistic sense. A boys' club cannot take up everything suggested in a book like this, but if a choice is to be made, this art should be carefully considered, at least for the sake of those boys that love and show aptitude for tools.

Fret-Sawing Equipment.

The tools that one must have are few : a saw-frame, a dozen assorted saws, an awl for boring holes, a few files with which to remove the rough edges left by the saw, and a few sheets of fine sandpaper.

Of course one may add to this list other useful tools if one's means permit. The most helpful are : a handle of tools, an oilstone for sharpening tools, a glue-pot, two or three wooden screw-clamps to hold glued articles together until the glue sets, and a drill with six small drills. To these may be added a small plane such as piano-makers use, a square, a gauge, and a hammer. A fret-sawing machine belongs to the category of luxuries. Everything that can be done by the machine can be done by hand, the difference being that it takes longer and is not so easy.

Wood-Carving Tools.

When a pattern is cut out with the fret-saw it is often flat and uninteresting. If the worker now puts in a few touches with the tools of a wood-carver a remarkable change takes place. The pattern is no longer flat. It is alive. Feeling and character have been put into it.

Of course wood-carving means much more than elaborating a fretwork design. Most of it has nothing to do with fretwork at all.

The tools used are legion. The object of the wood-carver is to bring out in clear relief a pattern traced on the wood. In most cases the background is simply cut away around the pattern. It is manifest that a great variety of tools may be utilized in such delicate work.

The beginner need not burden himself, however, with a load of elaborate tools. He must have, say, three flat chisels of different sizes, the best being one-half inch, five-sixteenths, and one-eighth. He will further require three shallow gouges of the same sizes as the chisels, and three deep gouges. He will also need a one-fourth inch skew chisel, a parting-tool three-sixteenths of an inch, and a fluting-gouge one-eighth inch wide. One will add to these as one gains proficiency in the art and the need arises for other tools with which to do other classes of work.

The Wood.

The ingenuity of the boys should be turned first and foremost upon a common cigar-box, to see how many useful articles may be made from it. The wood is excellent for fretwork.

Black walnut, one-fourth inch thick, and planed smooth on both sides, makes a medium not to be surpassed. It is easy to work, and its rich color and beautiful grain make it suitable for purposes of ornament. Cherry, mahogany, rosewood, red cedar, satinwood, and Spanish cedar (the wood used for cigar-boxes), are all good in their way.

In every case the wood should be well seasoned. It is provoking to spend hours of labor on a piece of work to find later that the wood warps and splits. If a piece of wood (before you begin to work on it, of course) has warped, and you wish to straighten it, hold it in front of a fire, with the convex side to the heat. Another method is to place a damp cloth on the floor and lay the wood on it, the concave side downwards, putting a weight on the top. In both cases the wood must be watched and removed when straight. Otherwise it will warp to the other side. If it has been dampened it should be set on its edge until dry.

Patterns.

Sometimes you may wish to copy a pattern

and at the same time enlarge it. To do this, take the original and rule it across, from side to side, and from top to bottom, with lines placed at equal distances, so that the whole resembles a checker-board. Mark off, on another piece of paper, the exact size that you wish the enlarged copy to be.

Now count the squares in the original, and rule off the same number of squares (which, of course, will be larger) on the larger sheet. Copy the lines of the pattern *square by square*, and you will have an exact enlargement of the original pattern.

The simplest way to transfer a design from paper to wood is to place a piece of ordinary carbon-paper underneath and trace over the lines with a hard, sharp pencil.

The Art of Sawing.

First of all, clamp one of the blades of the saw fast in the saw-frame, so that the blade is stretched taut. A slack blade will not cut well. Place the wood on which the pattern has been drawn on the table with the edges projecting. Cut into the wood until you reach the outside line of the drawing, and then follow the line carefully. Work the saw up and down, with short energetic motions, turning the wood round and round with the left hand, and feeding it to the saw. When the outside lines have all been cut, bore holes on the inside lines,

which, you will see, cannot be reached otherwise. Unclamp the upper end of the saw. Pass the thin blade through one of the holes and reclamp it. Proceed to cut along the lines in this section. Treat all other isolated inside parts in the same way.

Should there be any irregularities in the wood, or should one side of the pattern not be exactly like the other side, file the offending parts away. Do not leave rough edges. It is worth while to take pains.

The beginner will find difficulty in cutting acute angles, or corners. It is hard at these places to saw to the line without destroying the sharpness of the angle. One way of meeting this difficulty is to draw the saw back slightly and cut across the waste wood to the line, cutting back to the corner later. Another method is to hold the wood stationary and work the saw up and down until a path is cut sufficiently large to permit the saw to be turned at a sharp angle.

If the frame of the saw prevents you from following any of the inside lines of the pattern, it may be necessary to turn the teeth of the saw inwards, or sideways, which will throw the back of the frame out of the way.

How to Use Wood-Carving Tools.

The tool is held with the end of the handle

in the palm of the right hand. The left hand rests on the wood, the fingers grasping the tool near the point and acting as a guide. When a mallet is used the tool is held in the left hand, the fingers resting on the wood and acting as guides. The blows must be very light. In fretwork leaves and scrollwork may be hollowed out and the veins of leaves put in with carving tools. A good rule is to work as far as possible with the grain of the wood, and go slowly.

When carving a pattern in relief a sharp tool is used to cut around the design, the ground being gouged out afterward. In some cases the ground is simply stamped with dies which produce an effect similar to much of the work done in brass.

Books on fretwork and wood-carving will give details and other suggestions. The above are intended to start beginners on their way.

CHAPTER X

SOME SUGGESTIONS

First Aid to the Wounded

In case of accidents it is surely good to know what to do. Very often what should be done must be done quickly, long before the doctor arrives. And this is also true in cases of sickness.

The entire boys' club may be organized as a class in first aid. This is a fine opportunity to recruit new members. Invite them to attend the class, and make it a stepping-stone to the society.

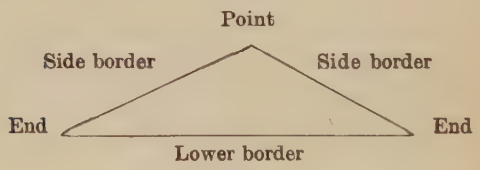
The class will be strengthened if the local doctor can be induced to teach it. The National Red Cross, which has an office at 124 East 28th Street, New York City, suggests a regular course of study, conducts examinations, and gives diplomas. If this be too elaborate, simpler lessons may be arranged. A good plan is for the teacher (if a doctor cannot be secured) to study one of the Red Cross books on the subject and then select such material as the boys may need.

If possible begin with a description of the organs of the body, their position, and their

functions. Then, by means of a chart, show the bones, muscles, veins, arteries, nerves, and so on.

Bandaging.

The standard bandage used is the Esmarch triangular bandage. It is made by taking a piece of cotton cloth forty inches square and cutting it diagonally across so that it forms two triangular pieces. Thus:



Notice these terms. They are constantly referred to.

Arm and Shoulder.

Let us suppose that the arm is injured and that we wish to support it. The bandage is folded lengthwise, about four or five inches broad. The one end is placed over the shoulder, leaving the bandage hanging in front of the patient. The wounded arm is then carefully bent upward in front of the bandage, until it lies across the breast. The lower end of the bandage is then lifted up in front of the arm,

carried around the opposite side of the neck, and the two ends are firmly tied behind the neck. A safer method is to fasten it with a safety-pin, since some knots are liable to slip.

If the injury is very serious, or if the shoulder is hurt, make the bandage very broad. This is done by placing the one end over the shoulder, as described, the point resting below the elbow. Bend the arm upward, lift the lower end of the bandage up over the arm, and fasten it behind the neck. The "point," which will be loose, may then be pinned in front. This makes an excellent sling and support for arm and shoulder.

Scalp Wounds.

If you have to deal with a scalp wound you will use the bandage unfolded. First fold a hem about two inches broad along the entire lower border. Place the centre of the border on the forehead of the patient, with the lower edge of the hem on a line with the eyebrows. The bandage will now cover the patient's head, the point hanging down his back. Take the two ends, carry them back just above the ears, cross them at the back of the head and bring them forward to the front of the brow, and tie them there. Then pull the point downwards so that the bandage fits the head nicely. This done, lift it up and pin it on top.

The Hand.

If the hand is badly wounded so that it must be entirely covered by the bandage, follow this method: Spread out the bandage. Place the hand upon it so that the fingers point to the point, the wrist being in the centre of the lower border. Now bring the point back over the back of the hand. Take the ends and carry them across the back of the hand, above the point; cross them and bring them around, tying them above the wrist.

The bandage may be folded into a narrow strip, if the fingers do not need to be covered.

The Foot.

The foot is bound up in much the same way as the hand. Place the foot on the bandage, the toes pointing to the point. Carry the point up over the instep. Then take the ends and carry them forward around the ankle, crossing them over the point; carry them back around the ankle again. Bring the ends forward and tie in front.

Carrying the Wounded.

A stretcher is of course the best method of carrying a wounded person, but accidents may happen when only one person is present to help, and then a stretcher is out of the question.

Let us suppose that the injured person is conscious and able to help a little. Get him to place his arm around your neck, so that his armpit rests on your shoulder. With your one hand grasp the wrist of this arm, while you throw your other arm around his waist, and in this way you will be able to assist him to walk.

When the injured person is unconscious, a good way is to throw him across the shoulders. Then pass his arm across your breast. If his head is on your left side, place your right arm behind his legs and take hold of his wrist, your hand passing between his legs. If he is properly balanced on your shoulders he cannot possibly fall from this position, and your one arm is free to use as you desire. This is necessary if you have to climb stairs, or go down a ladder with such a burden.

An excellent method, when several people are present, is the four-handed chair. Another way is to lay the patient on his back. Let one pass his hand under the patient's armpits and raise the body slightly—sufficiently to lock the hands in front of his chest. The second helper passes one hand around each of the patient's knees and carries one leg under each arm.

The Stretcher.

The important matter about a stretcher is

that it be strong enough to carry the patient. Its strength should always be tested before the injured person is intrusted to it.

A board, a shutter, a strong blind, almost anything of this nature will do for the purpose, in an emergency. An excellent stretcher may be made with an overcoat. Turn the sleeves inside out—only the sleeves. Button the coat. The sleeves will then be inside the coat. Then run a pole through each sleeve. The pole will pass inside the coat and form a first-class bearer.

In the woods two strong branches may be used for the poles of a stretcher. Bind them together with vines and smaller branches.

In carrying a stretcher or litter, a few very simple rules should be observed. The patient's head should generally be kept slightly higher than his feet, so that the taller of two bearers should carry the head end of the litter. If the patient's leg is broken the leg should be slightly higher than the head. Carry the patient always feet first, except when going upstairs or ascending a hill, when the head, in order to be kept high, should go first. Never carry a stretcher shoulder-high.

The bearers will do well to see that *they do not keep step.* If the one in front starts with the right foot, the one behind should start with the left.

Stopping the Flow of Blood.

When the flesh of a person is wounded and there is a flow of blood, it is important that the wound be bound up so that this loss of blood be stopped.

First, it must be determined whether the flow comes from a severed vein or artery. Arterial blood usually comes in spouts or spurts, as the pulse beats. When this is the case a tourniquet should be bound around the limb *between the wound and the heart.* The tourniquet should be so tight that the pressure exerted closes the artery, as one might hold the end of a rubber tube to prevent the flow of water.

A tourniquet is made preferably with a proper bandage folded very narrow, or with a handkerchief. Tie the bandage loosely around the arm, if the arm is wounded, a few inches above the wound. Take hold of one side of the bandage and give it a turn, forming a loop. Through this loop pass a piece of wood five or six inches long. Twist this until the tourniquet is tight enough to prevent the further flow of blood.

If the artery lies deeply embedded in the limb, take a pebble, place it under the tourniquet, straight above the artery, and tighten the bandage. The pebble is thus pressed firmly down upon the artery. Even if no pebble be

used it is well to make a small pad and use it in the same way.

Bleeding from a severed vein is usually recognized by the steady flow of blood. Treat the trouble in the same way as an artery is treated, but place the tourniquet on the other side of the wound, that is, on the side farthest from the heart. Where both arteries and veins are lacerated two tourniquets must be used, one on each side of the wound.

When the wound is in the neck, place the finger above the place where the artery or vein lies and exert firm pressure.

Drowning and Suffocation.

The treatment for drowning and for suffocation from gas is practically the same. Its object is twofold: first, to restore breathing, and, second, to produce warmth and circulation.

In a case of drowning act quickly. Do not take time to remove the patient, unless there is danger of freezing. Loosen all clothing about the neck and chest, and wipe his nose and mouth. If the teeth are clinched, force the mouth open and place a small piece of wood between the teeth. Roll the patient over on his face. Place a pillow under his stomach, or lay him across a barrel or your knee, his head hanging downward. Press his back until the

water has run out of his stomach. If necessary, pull his tongue forward to prevent it from closing the passage at the back of the mouth.

To restore breathing, turn the patient over on his back. If two people are present, let the one raise the patient's arms above his head, on a level with the ground, until the hands meet. Keep them in this position.

Sit now astride of the patient. Place the balls of your thumbs on either side of the pit of his stomach, your fingers lying in the grooves formed by the short ribs. Throw your weight forward on your hands, pressing upwards as if you wished to push the contents of the patient's stomach into his mouth. Continuing the pressure, count three very slowly; then let go and throw yourself back into your original position. Count three slowly again, and then repeat the operation from the beginning. These artificial "breaths" may be given from five to fifteen in the minute. Begin with the smaller number and gradually increase their frequency.

Meantime it is essential to try at the same time to increase the warmth and arouse the circulation. A helper should use vigorous friction, rubbing the body upward in the direction of the flow of blood toward the heart. Hot cloths may be applied to the stomach and armpits. Hot bricks may be used—anything that

will increase the heat. Care must be taken that the patient is not burned.

Even after the patient begins to breathe, artificial respiration should be kept up for some time.

If the patient has been in the water for less than thirty minutes there is hope for him. Cases are on record where the patient was revived after having been twenty-five minutes submerged. Artificial respiration should be kept up for three or four hours, if necessary.

When breathing has been restored put the patient to bed and keep him warm. He should be kept absolutely quiet, as there is danger from congestion of the lungs.

Broken Bones.

If an arm or leg be broken, splints should be improvised before you attempt to remove the injured person, otherwise the damage is likely to be increased. Spread a coat or an overcoat on the ground. Begin at the one side and roll it tightly toward the centre; roll also the other side toward the centre, so that the two rolls meet. Gently insert this lengthwise under the leg, so that the rolls rest one on each side of the wounded limb. Now place a board or a stout branch of a tree under the limb and tie the whole firmly together. If care is exercised the patient may be removed with a minimum

of danger. Splints for the arm are made, of course, in the same way.

Mad Dog or Snake Bite.

Tie a cord tightly above the wound. Suck the wound or cauterize it with caustic or a white-hot iron. Some cut out the adjoining parts with a knife. Of course a doctor should be found as soon as possible. For snake-bite, twist a piece of cord tightly around the limb to prevent the poison from spreading. Then cut deeply into the flesh, and wash out the wound *thoroughly* with a solution of permanganate of potash. Five cents' worth from a drug-store will make two gallons of solution.

Sunstroke.

The first thing to do is to loosen the clothing and to get the patient into a shady place. The head should be kept in an elevated position and ice-cold water applied to it.

Sprains.

Elevate the limb. Rub it gently *upward.* If the pain is great so that the sprained part cannot be touched, rub the part immediately above the place. If this rubbing can be continued at short intervals for an hour or two it will do much to mitigate the severity of the sprain. Hot fomentations should be used.

Burns.

Keep the air away from the burn. This is done by applying cooking-soda and oil, flour and lard, or any similar combination. Do not break the blisters.

Fire in One's Clothing.

Do not run. Do not run down-stairs or out-of-doors. Roll on the carpet, or wrap a woollen blanket or rug around yourself. Try to keep the head away from the flames so as not to inhale them.

In Case of Fire.

Here are some wholesome rules to follow in case of fire.

Crawl on the floor, because the clearest air is always nearest the floor. Cut two holes for the eyes in a woollen wrap, wet the wrap, and cover the head with it. Do not get excited.

If you live in a flat, you should know where the fire-escapes are and how to get out in case of fire. You should know how to reach the stairways and especially how to reach the roof. Sometimes it is impossible to get out in any other way.

At the call of "Fire," try to keep your head. Do not open the doors of the rooms. That feeds the flames by causing draughts. Open the windows from the top. If the room is full

of smoke, get a wet towel, stuff it in your mouth, and breathe through it rather than through your nose. This helps to prevent you from swallowing smoke. Stand at the window and get the advantage of the outside air. If the room is very full of smoke, get down on your hands and knees and crawl along the wall to the window.

Do not jump to the street unless the flames behind you are scorching you. Even then do not jump if firemen are in sight. To jump is almost certain death. Go to the roof only if there is no other way to get out, and then only if you can pass from the roof to some other building. In big buildings fire always goes to the top.

Boating Accidents.

Prevention is better than cure. Do not move around in the boat, changing places with others. This is the cause of a multitude of accidents and deaths every summer. Be seated before the boat leaves the shore, and keep your seat until you get back to the shore.

Never rise up in a small boat. If the water becomes rough from a sudden squall, or from a passing steamer's stern waves, do not get excited and stand up. The nearer the bottom of the boat you are, the less danger there is. Sit still until the danger passes.

If the boat overturns from any cause coolness is invaluable. If a lady grasps her skirts and holds them out like a balloon, while she uses her feet as if she were walking up-stairs, this will keep her afloat until help arrives. If a man makes these stair-climbing motions with his feet while he holds his arms by his side and pushes downwards with widely extended hands, he may keep himself afloat several minutes. Remember that one minute may mean life.

Box Furniture

I believe in the possibilities of the common box. From it may be made scores of articles of furniture at a mere nominal cost. And as boys as a rule are handy with tools, they will take especial delight in learning how to make real furniture out of despised boxes that the grocer throws out for fire-wood.

In this connection let me refer to a book entitled "Box Furniture," by Louise Brigham, which shows, with a wealth of illustration, just how to make a multitude of useful things. It may be procured from the United Society of Christian Endeavor, Tremont Temple, Boston, Mass., price $1.60.

The simplest article is, perhaps, a plant-box, easily made, and exceedingly dainty. From this one may go on to make a golf-stick or umbrella-stand, or a hanging lamp. Book-

cases belong to the category of easy articles, and racks, shirt-waist closets, wash-stands, window-seats, and numberless other things, are all presented in detail in the book referred to. The training obtained from the making of these articles is valuable in itself, but better still is the inventiveness which must be stirred into activity by seeing what can be done with waste material.

A Glee Club and Band

Music should have a prominent place in the club. It will, of course, be impossible for a superintendent to do everything. In fact, the secret of a successful club is to have the superintendent plan, and get others to perform. Some young man or woman, fond of music, will surely be found to teach a glee club.

An instrumental band will meet with even more success if it can be organized. The main point will be to secure a leader. The boys will be more than willing. And we may be sure that a club that boasts an orchestra or a band as well as a glee club will prove a tremendous attraction to other boys. And that is our aim.

Library

Even if there is a first-rate library in the district, it is well to have a library in connection with the club. It should be stocked with

books that deal with the subjects that the boys are studying, sloyd, art metal work, and so on. Nature books should find a large place too. Also books of games. It will pay to get good stories also, if this be possible.

Newspaper

If the treasury can bear it, a good idea is to procure a small printing-press and print a club newspaper. The boys will do all the work, of course. One of them will be editor, and others will be reporters, news-gatherers, typesetters, printers, and so on. It is worth while making a strong effort to realize this plan.

Civic Studies

Thousands of people who are brought up within a stone's throw of the great cathedral in Glasgow, Scotland, have never entered its doors and know nothing of the interesting relics that are to be found within. Familiarity breeds ignorance, if not contempt.

Civic pride can be fostered by teaching our boys something of the city and its ways, or of the town, or village.

The city may be studied systematically. Its boundaries and landmarks should be discovered and visited, and points of historic interest noted on the way. This will prove a

fine objective for more than one outing. Interesting spots should be visited also, and their story told. Then another day should be spent at the water-works, if they are within reach. The city hall, of course, must have attention. Museums, art galleries, and such places will not be neglected. Generally an efficient leader can be secured for such expeditions.

It is essential that the boys should know something about the government of the city. The best way is to have special talks on various subjects connected with city government. A doctor will tell of the board of health and its duties. A judge will tell something of the court. A lawyer will speak on the law. Possibly a representative or former representative from the State legislature will come and tell the boys about the legislature. Some one from the city hall may be willing to sketch the activities of this centre of civic life.

In order to illustrate a law-court, mock trials may be got up. In the same way, to teach the boys how an election is carried on, a miniature election for mayor and other civic officers may be carried through. In all such schemes the superintendent will have to secure the co-operation of competent helpers. If the club is of any size there will hardly be any difficulty in getting all the help that is required.

The factory life should not be neglected.

Some managers will be glad to tell the boys some facts about the factory and its manufactures. Every trade and profession may be utilized for a talk. Bankers will tell about banking and implant the idea of thrift. Railroad men will tell about the railroad; a post-office official will tell about post-office work; and so on all along the line.

Entertainments

The club will probably wish to give special entertainments, especially if there is a glee club, an orchestra, or an instrumental band. These entertainments will afford an opportunity for the activities of a dramatic club. There are many small dramas which the boys may present acceptably.

It may be possible also to make arrangements for a moving-picture exhibition under the auspices of the club, at which a talking-machine would come in handy. An evening in charge of a good sleight-of-hand performer will be a roaring success. At a social a ventriloquist usually makes a hit, and it goes without saying that an elocutionist, who can give some good personations and readings, is always acceptable. The ingenious superintendent will forever be on the lookout for something new, or, at least, just a little different from the ordinary.

Picture Puzzles

The boys will enjoy making picture puzzles. Pictures may be clipped from the magazines, or colored prints may be used. They are carefully pasted on cardboard or thin wood, then cut into all sorts of fantastic and difficult shapes. The puzzles that are pasted on wood are the best. They may be cut out with fret-saws, after which the edges should be rubbed smooth with sandpaper.

More Suggestions

The leader or superintendent of the club may take the boys to see ball-games. This increases the spirit of fellowship and comradeship.

If there is any exposition, electrical, mechanical, or such like, in town, the boys will enjoy a visit to it, and will profit by what they see.

Flower-shows, or exhibitions of farm produce or utensils, afford an excellent opportunity to awaken in the boys an interest in nature.

Honor Badges

Each club will make out a list of honor badges to be given to the members when they pass an examination in certain studies. No limit need be set to the number of these badges. They may be given for proficiency in archery, signalling, swimming, ambulance work, kite-

flying, astronomy, tree lore, butterfly and insect lore, bird lore, art metal work, electricity, or any subject that the club teaches.

The badges should be open only to first-class life-guards, or members of the highest grade. They should be worn on the right arm, between the shoulder and the elbow, the life-guard badge being worn on the left arm.

The badges may be home-made, and the design of each should in some way correspond to the thing for which the badge is given. Thus the ambulance badge will be a red cross. A bicyclist's badge will be a wheel. An arrow, or a bow and arrow, will do for the archery badge. A helmet will serve for the fireman's badge. Two crossed flags will indicate a signaller, and so on indefinitely.

The superintendent will fix the standard, in writing, which must be attained before a badge is granted in any subject. The aim is not to make the honor easy to win, yet it must not be made so difficult that the boys will be discouraged. When a boy has won half a dozen honor badges he will be given one silver stripe to be worn on the cuff of his jacket.

Honor Examples.

Two important branches of work which every boy should understand are ambulance work or first aid to the injured, and what to do in case

of fire. In fixing the standard for the former the most vital points should be selected. Of course, if a boy passes the international examination in this subject, he will naturally be entitled to a badge.

First Aid to the Injured.

The following points should be kept in mind in fixing an honor standard:

How to deal with burns.

How to improvise a stretcher.

How to deal with wounds bleeding from vein or artery, or internally.

How to bandage wounds.

How to improvise and apply splints in case of broken bones.

How to lift an injured person.

How to treat a person who has taken poison.

Knowledge of the principal poisons and their antidotes.

How to remove dust from the eye.

Knowledge of sanitary conditions.

Knowledge of the effects of alcohol, smoking, and lack of fresh air.

What to Do in Case of Fire.

The boys should be able to locate all the fire-alarms in their district and to explain how to send in an alarm. They should be taught

something about the fire-brigade, the fire-engine, the unrolling of hose, and the use of the nozzle, hydrants, ladders, fire-escapes, and so on.

It is especially important that they be taught:

How to extinguish a small fire, when to use water, and when water only causes the fire to spread.

How to use fire-extinguishers. The different makes of these useful apparatus should be examined and explained.

How to work in smoke and fumes.

How to rescue people, carry them, or drag them.

How to rescue animals.

How to save property, or salvage work.

The Stars and Stripes

The first United States flag was adopted by Congress June 14, 1777. It was then decided that the flag of the thirteen United States should be thirteen stripes, alternately red and white; and that the union should be thirteen stars, white, in a blue field, representing the new constellation.

The first flags were home-made. A note in Montgomery's "Leading Facts of American History" speaks of a flag that was hoisted at Fort Stanwix (near Rome, N. Y.), during Burgoyne's campaign in 1777, as having been made

out of a soldier's white shirt, an old blue army overcoat, and a red flannel petticoat.

The flag that was raised when Washington took command of the army at Cambridge was the British flag with thirteen red and white stripes added.

In 1795 the flag of the United States was changed so that it contained fifteen stripes, alternately red and white, and fifteen stars, white, in a blue field. This was to mark the admission of Vermont and Kentucky into the Union.

In 1818, however, Congress reduced the number of stripes to the original thirteen, and provided that at all times the number of stars should correspond to the number of States in the Union.

With the national flag will always be associated the national song, "The Star-Spangled Banner." The author was Francis S. Key of Baltimore, who at the time he wrote the stirring words was a prisoner on board a British man-of-war.

The British force was attacking Baltimore, which was defended by Fort McHenry. All day and all the following night, September 13, 1814, the British guns hammered away at the fort. As the hours dragged along, Mr. Key and many others asked themselves the question, "Can we possibly hold the fort?" As the new day broke, the young officer saw the Stars and

Stripes still fluttering above the ramparts. The British had given up the attack, and were sailing down Chesapeake Bay.

Honor the Flag

Various simple ceremonies are observed in honoring the flag.

The flag should not be hoisted before sunrise nor allowed to remain up after sunset.

At "retreat," sunset, civil spectators should stand at "attention" and uncover during the playing of "The Star-Spangled Banner." Military spectators are required to stand at "attention" and give the military salute.

When the national colors are passing on parade, the spectator should, if walking, halt, and, if sitting, arise and stand at "attention" and uncover.

On Memorial Day, May 30, the flag should fly at half-staff from sunrise until noon, and at full staff from noon until sunset.

Practical Helps

Workers with boys will find every one of these books practical and helpful, abounding in information of the kind that boys want. They are part of the leaders' tools. Information goes far on the way to efficiency.

Games for the Playground, Home, School, and Gymnasium, by Jessie H. Bancroft, price $1.50.

Three Hundred Games and Pastimes, by E. V. Lucas and E. Lucas, price $2.00. (For younger children.)

Tracks and Tracking, by Joseph Brunner, price $1.25.

The Outdoor Handy Book for Playground, Field, and Forest, by D. C. Beard, price $2.00.

The Book of the Boy's Model Aëroplanes, by Francis A. Collins, price $1.20.

How It Flies, by Richard Ferris, price $1.20.

Astronomy for Amateurs, by Camille Flammarion, price $1.50.

Hand-Book of Birds of Eastern North America, by Frank M. Chapman, price $3.00.

Hand-Book of Western Birds, by Mrs. Florence Merriam Bailey, price $3.50.

First Studies in Plant Life, by George Francis Atkinson, price 60 cents.

Raffia and Reed Weaving, by Elizabeth Sanborn Knapp, price 50 cents.

Clay-Modelling for Schools, by Anna M. Holland, price 75 cents.

Elementary Sloyd and Whittling, by Gustaf Larsson, price 75 cents.

First Aid to the Injured, by F. J. Warwick, price 50 cents.

Box Furniture, by Louise Brigham, price $1.60.

Art Crafting in Metal for Amateurs, by F. Alexander, price $1.50.

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While hundreds of books have been written on the vital subject of the young man and the problem of sex and of personal purity, this book in a comparatively small compass tells all that a boy or young man or the man in middle life needs to know about these matters. It explains in an expert and absolutely modest, yet honest and fearless way, the great mysteries of physical life.

Every boy and young man is more or less ignorant on the subject of sex. There is a great need of such a help as this book gives on topics ordinarily avoided by parents and teachers, because in the world about him the young man meets with so much that is impure, suggestive, and vulgar.

The authors are amply equipped to write such a book. Rev. F. B. Meyer, who deals with the more spiritual and religious side of the subject, is probably the wisest and most beloved adviser of young men who lives to-day.

Rev. E. A. King, the other joint author of this volume, has also peculiar qualifications for his task. He was fitted by special studies in the Y. M. C. A. Training School at Springfield, Mass. He has been a physical director, and has, besides, spent fourteen years in study and observation, and has read almost everything on the subject.

In every word he has written is a spirit of optimism, hope, and confidence, so that when the young man finishes reading he will feel like beginning then and there to live the noblest life possible.

Parents who are interested in purifying and uplifting the tone of morals of the boys in the high schools and colleges of the country can do no better service than to place in their hands this splendid new book.

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